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EIGHTH BIENNIAL REPORT

OF THE

Wisconsin BUREAU OF

Labor and Industrial Statistics

STATE OF WISCONSIN,
1897-1898.

HALFORD ERICKSON, Commissioner.

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LETTER OF TRANSMITTAL.

Bureau of Labor,
Industrial and Census Statistics,
Madison, Wis., September 30, 1898.

To His Excellency Hon. Edward Scofield,
Governor of Wisconsin.

Dear Sir:—I have the honor to transmit herewith the Eighth Biennial Report of the Bureau as required by the laws of this state.

Very respectfully yours,
Halford Erickson,
Commissioner.

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INTRODUCTION AND RECOMMENDATIONS.

The present is the eighth biennial report of this bureau as required by law.

The volume includes three separate parts. The first of these relates to the "Cost of Production" of grain and to the relation of this cost to the "Value" of the products. The second part deals mostly with the "Factory Inspection" and the condition of factories and workshops with reference to the factory acts. The third part relates to Manufacturing Statistics of this state and presents comparisons between the returns for the years 1896 and 1897. These returns were obtained from identical establishments and, being prepared on the same basis, show the increase and decrease in the different elements in the industries into which they were classified.

The material for part I. was obtained upon schedules and personal letters from farmers in all parts of the state. Over 3,000 returns were received. Of these 1,510 schedules or those which appeared the most complete and reliable besides the information obtained through hundreds of other inquiries were used as a basis for the computations presented in the tables.

Generally speaking the share of the farmer in the products he raises consists of the difference between their cost and value to him. To the farmers the amount of this difference is of the greatest importance. When large his income is also comparatively large and this enables him to expend more on himself and his family for personal comforts. When small he has less to expend for these purposes. On the farm as in other productive industries the economic condition of the producer is therefore largely determined by the margin above the expenses of production, or in other words, by the relation of the cost of production to the selling price of the products. It was the original purpose of this investigation to show this relation.

The relation of cost and value of a product or class of products is not easy to find. Particularly is this true of farm products. Among the reasons for this are, a very obvious lack of official data relating to it and the fact that comparatively few farmers keep accurate accounts. Of the official bureaus, only very few seem to have made any efforts to obtain data of this nature. There is not even any fairly complete classification of the expenses involved. Most farmers carry their accounts in their hats and the data wanted is not always accessible. The importance of such data, however, is unquestioned and the present is an effort to contribute a little in this respect.

In entering upon this investigation two methods suggested themselves. One was to obtain the total expense on each of the farms included, in raising the entire crop for that year. The other was to find the cost and value of each crop separately. The first method would involve less labor, but as accurate accounts are not always kept it was found impracticable. The latter was therefore adopted. If completely carried out this would also prove the most satisfactory. The labor required for presenting each crop in detail, however, was found to be so great that it became necessary to limit this effort to a few crops only. Of the crops included, however, the presentations are complete.

During the past decade much has been said about the condition of the American farmer. While what has been said in this connection is not entirely one sided, most of it tends to show that there is a general depression in agriculture or that the farmer's lot is a hard one. In most cases, this conclusion seems to have been drawn from the prevailing low prices of grain. The prices of this period have usually been brought into comparison with prices of preceding periods and the difference pointed to as absolute proof not only of the fact that a depression exists, but also of the extent of this depression.

While the average price of grain during this period has ranged very low and while many farmers have suffered greatly in a financial way therefrom these facts alone do not prove, by far, that there has been or is a general depression in agriculture. In the first place all farmers do not depend upon grain raising alone. In fact the greater proportion of them have long ago substituted this by other branches of farming such as truck, fruit, or mixed farming and cattle raising. This change has also proved advantageous and is steadily progressing. The farmers are as quick to see and grasp new opportunities as any other class. Exclusive grain-raising is now confined to the farmers in a few of the western states only. Those who are engaged in dairying and cattle raising may even be directly benefited by low prices of grain, particularly of such as are used for feed. Low prices of grain alone can therefore, at most, only effect localities where this is largely or exclusively raised or depended upon. At any rate they are inadequate as a basis for conclusions regarding the agricultural condition as a whole in this country. By the readers of this part of the report this should be steadily borne in mind.

The prevailing low price of grain is also largely offset by a reduced cost of production through improved machinery and methods, as well as through lower transportation charges. The combined reduction through these sources may not be as great on the whole as the fall in prices, but it certainly goes a good ways to offset any loss that may have occurred to the farmers from this source.

The data upon which part III. is based was obtained from manufacturers. The number of establishments from which complete returns were received for each of the two years covered or compared was 1,499. In the presentation of this data as well as in its classification as to industries the plan used by the bureau of Massachusetts for its report of manufactures for that state was, as far as possible, followed. The reasons for adopting this plan are several. In the first place it represents the result of years of experience in statistics of this kind by the most completely organized and efficient state bureau in this country and has apparently proved a success in every respect. Then again, since the data covers almost exactly the same facts, it will enable comparisons between like industries in the two states. The real purpose of this investigation is to show the trend and volume of business for each year covered and to establish a basis for future work along this line.

During the past two years the bureau through its inspection of factories has made special efforts to enforce and carry out the various provisions in the factory acts. While it has been found impossible to meet every requirement in this respect a great deal has been accomplished. From Feb. 1, 1897, to Sept. 1, 1898, 2,463 establishments occupying or using 7,228 separate buildings; 69 hotels; 548 churches; 330 schools; and 68 assembly halls, or a total of 8,240 buildings received more or less attention. In fact, many of those factories in which children are employed were inspected six times during this period. Counting each additional inspection as one and including other buildings than factories on the same basis the number of separate establishments inspected number 4,943.

Part II. of this report has been devoted to the "Factory Inspection" and embraced the reports of the work done and facts gathered at 3,713 separate inspections. For convenience these reports or inspections were classified as "General and Special" according to their nature or scope. The "General" inspections include a report for each one of the 3,498 establishments inspected showing their condition with reference to the various provisions in the factory laws. The "Special" inspections relate entirely to child labor and includes the reports of 3,360 children 16 years or under who at the time of inspection were employed in 215 factories. Of all other inspections the reports could not be included.

During the period covered above 1,292 changes or improvements were ordered. Of these 1,021 affected the conditions in factories and workshops including the dismissal from work of 327 children who were found to be under 14 years of age; 51 related to hotels, etc.; 121 to churches; 81 to schools; and 18 to assembly halls, etc. These orders have also been presented in detail as well as analysed in connection with the reports. Since the closing of this report, or between Sept. 1, 1898, to Jan. 1, 1899, over 250 violations of the child labor law alone besides a large number of violations of the other acts have received attention, and the provisions covering them enforced. Full reports of these cases, however, could not be presented here.

Part II. thus shows the greater part of what has been accomplished in the factory inspection department of this bureau during the period given above. What has thus been done, however, does not include all that ought to have been done. While our two inspectors have been kept at work steadily and have received help from other sources the duties of this department are so many and require so much labor that it has been found impossible to fully perform all of them. Many places, particularly where children are employed, it has not been possible to inspect or visit as often as necessary. Many inspctions have also been less thorough and many provisions enforced with less vigor than ought to have been the case. More inspectors therefore are needed. In the interest of the wage-earners as well as of the state a law providing for an increase in the number of factory inspectors should therefore be enacted.

In order that these duties may be better understood further explanations are necessary. They embrace the enforcement of the provisions relating to the labor of children under 14 years of age; to safeguards around bull and fly wheels, tumbling rods, shafting, gearings, belting or dangerous machinery of any kind; also around vats, pans, or other structures containing molten metals or hot liquids; and hatchway, elevator, stair and other openings so located as to be dangerous to workmen and others; the communication between engineer and workrooms; the inspection of passenger and freight elevators in factories, storehouses, office buildings, hotels and other buildings; to sanitary regulations in general in all buildings mentioned herein; to fire escapes on factories, etc., more than two stories high in which twenty-five or more persons are employed, and on office buildings, storehouses, hotels and boarding houses more than two stories high and containing offices, theaters, assembly halls, workrooms and sleeping apartments designed for the occupancy of twenty-five or more persons; the posting of notices in the various places inspected; the employment of women and minors; the outward swinging of doors on the buildings mentioned above including churches; and to various minor provisions.

Generally speaking, therefore, the duties of the factory inspectors may be said to consist of enforcing the laws which regulate the condition of labor in factories and workshops and provide for the protection against accidents from fire, and from the use of elevators in factories, office buildings, schools, assembly halls, churches, hotels, etc.

While this includes most of the more important duties of the factory inspectors it does not give those who are not familiar with them, any adequate idea of the amount of labor required to properly perform them. Even the detailed reports of the inspectors themselves fail to do this. The reasons for this are found in the nature of the labor required. No provisions for instance can be enforced without preceded by a careful inspection. The inspectors must not only discover the cases where the laws are not complied with but prescribe the remedy, and see to it that the changes ordered are carried out. All this requires a careful study of the situation in each case and this in turn takes time. Particularly is this true of provisions which relate to the labor of children under 14 years of age, to dangerous machinery and to the sanitary conditions. Single violations in any of these cases often require days, if not weeks, of systematic effort to establish and correct.

As said, the provisions that no child under 14 years of age shall be employed in factories and workshops unless upon a special permit are among the most difficult to enforce. The real reasons for this may be traced to the pressure and means adopted on the part of the parents and others to obtain employment for their children and to the lack of proper precautions or desire, to prevent such employment on the part of the employers. Many parents are so anxious to find work for their children that they do everything in their power to evade the law. Not only are the children taught how to deceive the inspectors as to their age, but are furnished with documentary evidence in the form of certificates, etc., for this purpose. The position of the manufacturers is, in many cases, little better than that of the parents. While not directly, perhaps, encouraging the evasion of this law they seldom require absolute proof of the age of the children before hiring them. The result of their failure to exercise proper care in such cases, is plain. On the whole, the employers are always in position to protect themselves from imposition of this kind. Any failure to do so makes them, at least partly, responsible for resulting violations. Since it became generally understood that serious efforts were made to enforce these provisions, the methods mentioned have among others been resorted to for the purpose of misleading the inspectors in practically every case when the children in question appeared to be under 14 years of age.

All concerned thus conspire to deceive the inspectors or throw them off their guard. As the inspectors cannot safely take action without being in position to prove their case they are forced to look elsewhere for the evidence necessary. The appearance of the children is, at best, an unsafe guide as to their age. With the names and addresses of both the children and their parents, official and school records may be examined. This is also, in most cases, the course taken. As to the official birth records, these are always defective and of little help. School records on the other hand, particularly those kept in private and parochial schools are always complete and, when accessible, furnish the necessary data. While thus, in one way or another, the facts wanted are found, the methods necessary to this end are roundabout and require more time than can be given without neglecting other duties.

To find appliances that will furnish necessary protection from dangerous machinery without greatly impairing its efficency is also difficult. Improvements in the sanitary condition and the erection of such fire escapes as are required by law are usually combined with considerable expense, and therefore resisted, or at least, under one pretext or another put off as long as possible. To enforce these and similar provisions, therefore require not only a thorough knowledge of the situation in each case, but constant pressure and attention. There are many other provisions which are as hard to enforce as those mentioned. The illustrations given, however, are sufficient to show their nature and the amount of labor necessary to perform these duties properly.

Besides the amount of labor thus involved in enforcing each one of the various provisions the number of such enforcements that must be made is also great. Including everything there are more than 5,500 separate establishments or places in this state that are affected by the factory acts. About 3,300 of these may be classified as factories and workshops. All other places such as office buildings, warehouses, hotels, etc., schools, churches, assembly halls, etc., number considerably more than 2,200. As on the average there are nearly three buildings to each factory establishment in this state this is equivalent to over 12,000 separate buildings which under the laws must be inspected for one purpose or another. The number of inspections required yearly for each building varies. From our experience in the past I feel justified in saying that, including everything, buildings in which children are employed should be inspected as often as once every two months; and other factory and other buildings at least once a year.

As there are fully 3,000 buildings in this state where children are or may at any time, be employed to a greater or less extent, the aggregate number of inspections needed yearly are not less than 25,000 a year. With only two inspectors, which is the number allowed under the present law, this is equal to 12,000 inspections a year for each inspector, or with 300 working days yearly, to 40 inspections daily for each. Including traveling, the making out of reports and other necessary work and delays it is safe to say, that under present conditions no one person can, on the average, inspect thoroughly, more than five buildings daily. On this basis the present equipment of this department is only about one-eighth of that required in order to perform all its duties fully or completely.

From the facts thus presented it plainly appears that the amount of labor required to properly enforce the provisions in the factory acts is entirely out of proportion to the number of inspectors provided for that purpose, and that therefore it is absolutely impossible for this bureau with its present equipment to fully or completely enforce all the provisions in the factory acts. Realizing these facts we have during the past term given attention to the more important provisions first. While thus, by constant efforts, we have been able to accomplish a great deal, particularly in the way of keeping young children out of factories and in school, many provisions which in the interest of society should be enforced have necessarily received only slight, if any attention.

As to the necessity of factory laws and their enforcement little need be said here. The experience under the factory system both in this country and Europe has amply demonstrated that under competition alone the best results to society as a whole could not be obtained. Competition has proved to be only one of the forces necessary to that end. Legal restrictions and regulations were also found necessary and this has lead to the enactment of the so-called labor or factory laws now in force in all manufacturing states and countries.

It is thus to the best interest of the state that all these provisions should be promptly and fully enforced. With two inspectors only, for this purpose, this is not possible. I therefore regard it as my duty to recommend that a law be enacted authorizing the appointment of additional factory inspectors.

Also recommend that the law regulating the labor of children be so amended as to require all employers of such labor to procure and keep on file, for the inspection of factory inspectors, a certificate under oath for each child sixteen years of age or under employed in any factoy or establishment operated by them.

As in the past I desire to acknowledge my thanks and obligations to Mr. Chas. Lewiston, deputy commissioner, and to all other officers and employees of this bureau for their hearty cooperation and faithful services in this work.

HALFORD ERICKSON,
Commissioner.

PART I.

COST OF PRODUCTION.

COST OF PRODUCTION OF WHEAT, OATS, RYE, BARLEY AND CORN.

The purpose of this investigation is to ascertain the relation of the cost of production of wheat, corn, oats, rye and barley to the value or selling price of these products.

By the cost of production is here meant the expenses or outlay of the farmers in producing the crops. These expenses consist of the value of all the materials used, such as seed. fertilizers, feed for horses, fuel in threshing, etc.; the amount due for labor at the ruling rate of wages in the different neighborhoods; the amount of the depreciation and interest on the capital invested in machinery, tools, horses, etc.; the rent of or interest on the value of the land used and incidental outlays.

By the "value or selling price of the products" is understood the actual price at which the grain was sold or paid for same in the local markets and the value of the straw and stalks, either for use on the farm or in the markets, as the case may be.

The material upon which this investigation is based was obtained from farmers throughout this state. That is, the farmers were requested to furnish such facts relating to the "cost of production" and "value of products" as were deemed necessary for the purpose in view. The information was secured through personal letters and inquiries and through printed schedules. The schedules were sent out first. Over 7,000 of them were distributed in different parts of the state. The inquiries they contained were intended to completely cover the scope of this investigation. All other inquiries were made later and chiefly for the purpose of throwing some light on points upon which the answers in the schedules were not clear or satisfactory. Several hundred letters were thus sent out and the supplementary information obtained from the answers was used in completing or correcting the schedules.

The schedules were distributed in the early part of 1897 and the answers cover the year 1896 and in most cases also the four preceding years. Over 40 per cent. of the schedules were returned and of these, all those which were complete or could be made so from the supplementary information received, were used in the following tabulations.

Many precautions were taken to prevent the use of misleading returns or figures. In the first place the schedules were carefully prepared and intended to cover the ground fully. As the expenses which enter into the "cost of production" are the most difficult to ascertain the questions relating to them were so framed that the answers showed not only the total cost of each item or operation for a given area, but also the items from which each sum was computed. Thus, while in one part of the schedule, the total cost per acre of, for instance, plowing was given, another part showed the time required and rate of wages paid for man and team, of a given number of horses in it, to plow the area in question. This method, as is readily seen, greatly enhanced the value of the returns because it enabled us to test or verify practically every item of expense before including it in the tables. Then again only returns which proved complete and apparently correct, or could be made so by replies to a second request for information upon points not fully covered in the first report, were included. Each schedule was also carefully edited and in this way aone, many clerical and other errors were corrected. It appeared that the most efficient farmers also made the best reports. Since only the most complete returns were included it is therefore likely that the standard of efficiency of those whose reports were used is somewhat above the average. It is not thought, however, that this fact materially affected the "cost of production" per acre. As to the "value of products" the case is different. It need hardly be said that the best managed farms give, as a rule, the largest yields. Reports from such farms would therefore show more bushels to the acre than reports from less well managed ones.

Of course, there are exceptions to this rule, but it undoubtedly accounts for the fact that the yield shown here is considerably above the average. It is believed, however, that on the whole the data, which has here been used as a basis, is correct, or at least, as reliable as any that can be obtained by similar methods, and that, coming as it does from all parts of the state, it may be regarded as fairly representative.

To the farmer, in the sense in which these terms are used here, "cost of production" represents the outlays, and the "value of products" the receipts, in growing the crops included. Thus if the receipts are the larger there is a balance left which the farmers may appropriate for their troubles and risks. If the outlays amount to more than the receipts, he may lose both rent and interest and in abnormal cases even be compelled to do without any return for his own labor. Generally speaking, it is the hope of being able to keep expenses below the receipts, or of making profits, that makes men invest their capital and employ their abilities in farming as well as in other productive enterprises.

Of the above sums the outlays or the "cost of production" is from a statistical point of view the most difficult to ascertain. As already intimated the different processes of production, as well as other items which must be taken into account, are either of such a nature, or, so closely connected as a whole, that their cost for each of the crops raised can only be determined by detailed and roundabout inquiries. Such inquiries were made. Before describing them in detail a brief account relating in a more general way to the three factors of production, land, capital and labor, or to what elements of expense are here included under each of these factors, will be given.

Land: In the sense in which it is used in this investigation this term includes not only the land itself but also all permanent improvements that have been made upon it. Such improvements generally consist of drains, dikes, fences, buildings used for farming purposes or for living houses by the farmer and his family, and other items. While improvements on the land are not land or nature but capital, and should therefore be classed as such, this could not be done here because it was found that separate reports of the value of the land and of the improvements made upon it could not be obtained.

Rent of land was found to bear about the same relation to the value of land as interest to the value of the capital used in production. The fact, therefore, that the land and the improvements were classed together does not affect the total expense. This is also the reason why the expense for the use of land in the following tables appears as interest.

Capital: Besides land and permanent improvements on same, as classified above, the farmers must have the assistance of machinery, tools and horses in carrying on their work. These and similar means of production are usually termed fixed capital and the expense of same consists of wear and tear and interest upon their value. The farmers must also have seed, fertilizers, fuel, binding twine, etc., and enough cash capital to pay labor, taxes and other current expenses. Productive means of this kind are usually classed as circulating capital and as this is entirely used up in production it must be wholly replaced out of the products. The expense of circulating capital therefore consists of the replacement of, including interest on, the total amount invested. In this investigation all investments for such purposes as those pointed out have been treated as capital.

Labor: By this is meant only labor as understood or classed by economists or for which wages is paid. Efforts and troubles of superintendence therefore are not included in this term.

In growing, harvesting and marketing a crop of grain much labor is expended. On many farms this labor is furnished by the farmers themselves and by members of their own family. On others it is furnished partly or wholly by hired help. In either case this labor is entitled to wages at the usual rates for similar work in the neighborhood. The amount thus due as wages from this source constitutes a part of the expenses of producing the crop and should, with interest and compensation for management and risks upon it, be replaced out of the receipts from the crop. The fact that in many cases a part or all of the work is performed by the farmer himself or by the owner of the land used for this purpose and of the crop in question, does not in any way reduce the expenses from wages because the farmer is just as much entitled to wages for his work as his hired man.

Among the farmers, however, those are few who do not find it necessary, at some stage in the progress of their work, to hire more or less extra help. The way in which help is hired varies greatly, and seems to depend almost entirely upon the circumstances in each case. Those who cultivate a great deal of land, and consequently use more labor, generally hire a given number of men by the year or season, and in addition to this, during the harvest, etc., as much extra help by the day or month as they find necessary. Those who have smaller farms, or with the assistance of the family are in position to do the greater part of the work, hire such additional help as they may need by the day or week. This method of only employing help for a few days at the time when most needed is, when possible, undoubtedly the best and most convenient to the farmers. But its effect upon farm labor is bad. It renders employment unsteady or uncertain in character and fosters a spirit of shiftlessness or unrest. As a result of the late depression, however, which largely increased the number of unemployed in the cities and forced them upon the farms, this method has of late years been much more common than in the past. The resulting increase in men seeking work has in most localities also depressed the rate of wages paid.

The methods of hiring also differ as regards board or maintenance. In some cases the board, lodging, washing, etc., of the employees are furnished by the employer. In others by the employees themselves. Instances of the former cases are, of course, the most numerous, owing mostly to the nature of farm work. Except in cases where the workmen have families and live in the neighborhood, board, etc., is mostly included when the men are hired for longer periods. When living in the vicinity and employed only a few days or weeks at the time the reverse is often the case.

While team work is not hired to any considerable extent, at least, when compared with other work, there was still enough of it done in almost all localities to enable us to obtain fairly reliable data as to the wages paid for such work. As a rule team-work is only hired for short periods, seldom exceeding one month. Day work seemed to be the most common. It also appeared that the maintenance of the horses mostly devolved upon their owner.

The rate of wages paid, per day or month for men and for man and team, with or without board, etc., included, is shown in the tables. The rate adopted or used in computing the expenses, however, is that per day "without board." This rate was used because it was found the most convenient. The board furnished to hired hands is, for its cost or amount, as much of an expense as the wages paid them. Should the rate "with board" have been used it would have been necessary to include in the expense one more item—that of labor maintenance. As it was found that the difference in wages in the two cases corresponded almost exactly to expense of boarding their men, as placed upon it by the farmers, it is, of course, plain that the lower rate with cost of board added would bring the same results as the higher rate without board. Since thus the total expense would have been the same in either case, it matters little which of the two rates were used.

In order to be able to ascertain the expenses of the labor involved in production it was necessary, besides the rate of wages, to also find the amount of labor needed to grow and market a given area or unit of products. By properly adapting the schedules we succeeded in ascertaining this. The labor involved was classified according to its nature and the questions were so arranged that the answers showed in historical order the time needed for a given number of men, or if team work, of men and teams, to perform each of the different parts or classes of the work from the time of plowing until the grain was marketed. The schedules were distributed early in the spring before work had begun. By some, those who kept records or books or had other means of determining the answers, they were returned at an early date. Others, mostly those whose facilities for correct answers were more limited, kept the schedules throughout the seasons, making observations as the work progressed and when through, reported the results. Conditions were therefore favorable for correct answers. And we have the best of reasons for saying that the data in the returns used is reliable.

Statistics of the cost of production in other branches of industry are generally considered practicable and there can be no good reason why the same cannot be said of farming. It is, perhaps, true that less efforts have been made from official sources to obtain figures relating to the cost of growing crops than to the cost of manufactures. This, however, may be due more to the fact that such statistics of manufactures are considered of greater importance than to any idea that they cannot be successfully extended to farming. But whatever the cause is the expenses of raising grain can certainly be ascertained. The farmers have less reasons for concealing importtant facts bearing upon the cost than the manufacturers and are fully aware of this. The amount of capital and labor involved can be measured with almost as much accuracy as in manufacturing. The accounts of a few farmers who favored us with their inspection bore ample evidence of this. It is true that many who cultivate small farms neglect to keep accounts, but it is also true that in such cases there is less need of bookkeeping than in almost any other undertaking of the same size. Among successful and experienced farmers those are few who are not able with a moderate amount of time and effort to figure out and report almost the exact time needed for labor in raising grain. That there is some safe basis upon which the amount of work involved may be determined is plainly illustrated by the fact that land is often farmed on shares, that is, an agreement by which one party furnishes land and perhaps machinery, and the other labor, etc., in growing a crop, each party to receive a certain portion of the yield in return for his investment.

The expense of labor has therefore been computed from the time involved and the rate of wages paid.

The different items of expense which enter into "cost of production" may now be described in detail.

Plowing: In the classification of the work of preparing the soil for seed, plowing has been placed at the head. This operation involves considerable labor on the part of both man and team. The method of plowing differs somewhat with the character of the soil, the size of the field or farm, etc. In some places hand plow and two or more horses are used, in others gang plow and four or more horses. One plowing has been charged to each crop. In the tables where wages was allowed for team work, the expense of plowing was computed from the time required and the rate of wages paid for man and team. In the tables where horses or the value of the same was treated as machinery or capital invested the expense was computed from the time needed and the wages paid for one man only. A comparison of the expenses under the two methods will reveal the fact that the cost is lower when horses are treated as capital invested.

Harrowing, etc.: Under this head is included all such work as disking or harrowing, dragging, rolling, etc., or the work necessary to prepare the plowed field for the seed as well as dragging after seeding where this is practiced. From two or four horses are usually needed in this work depending upon the kind of harrow or tool used. The returns developed the fact that more care is taken in the preparation of the soil for corn than for grain, for instance, for corn the fields were harrowed nearly four times over while for grain the average number of times over was somewhat below three only.

Seeding and Planting: This includes all the work of all kinds required in properly putting the seed in the soil. The terms seeding and planting refer to grain and corn respectively. In all cases of seeding grain, machinery—seeders or drills—with horse power were used. Corn was also planted with so-called horse planter except in a few isolated cases in which hand planters were used. From two to three horses are usually needed to each seeder and one or two to each planter.

Cultivating: This term applies only to corn and includes all the labor involved in cultivating and keeping the corn clean and the soil loose from the time of planting, until it is so far advanced in growth that no further care is needed. Besides dragging in the early stages and some hoeing from time to time corn is ordinarily cultivated from three to five times during the season.

Cutting: In the case of grain, all the work of cutting same when ripe or ready for harvest is included in this item. This work was in all cases done with binders each requiring from two to three horses. In the case of corn it includes the work of cutting, binding and of placing the bundles in shocks. Corn was mostly cut by hand though binders are rapidly being brought into use. When cutting by hand one to one and one half acres was found to be a good day's work. With binder four to six acres were usually cut in one day. When binder is used, however, there is need of at least from one to four extra men depending upon the kind of harvester used.

Husking, etc.: In this item is included the work of husking and cribbing the corn. When cut and put up in shocks or stacks husking is invariably much slower work than when standing in the field. The larger expense, however, of husking from the shock is more than counterbalanced by the great value of the stalk for fodder when cut up and properly cared for. Where cattle are raised—as is the case on practically all farms in Wisconsin—the interest of the farmer lays in cutting the corn before husking, and as this was mostly practiced by those reporting, the expense of husking comes quite high. When husked standing a day's work becomes nearly twice as effective and the expense of cutting is eliminated.

Shocking: This includes the work of putting up in shocks preparatory to hauling away and stacking of all the grain or sheaves as left by the binder. In a few cases this work was reported dispensed with, the grain being hauled directly to the stack or machine; but instances of this kind were so few in number as not to materially effect this item of expense.

Stacking: The grain is usually stacked in some place convenient for threshing, and this item includes all the work connected therewith. The expense of this depends somewhat on the distance of hauling. Usually two men are needed to each team.

Threshing: This expense consists of the labor involved, and of the amount per bushel paid for the use of the thresher and engine. From 16 to 20 men are usually required to each engine, the wages of four of which are mostly paid by the owner of the engine, while the wages of the balance are paid by the farmer.

Marketing: The expenses of this item are based upon the time required to haul—including loading and unloading—the products from the farm to the market or place where sold. As the products are practically all sold at the nearest railway station or home market, freight charges do not enter into this expense.

Taxes: This item includes the amount paid out in taxes on land or other property used in production. The amount per acre was arrived at by dividing the amount paid last year with the total number of acres in the farm.

Seed: This item includes the cost of the grain used for seed. This expense is based upon the quantity used and the price of same. It will be noticed that the price of seed foots up to quite a sum. In the case of corn it is very small.

Maintenance of horses: When wages are paid for team work, maintenance of team is included in the wages paid, and enter into the expense of production in the form of higher wages. When horses or their value are treated as capital invested in machinery or motive power, and depreciation and interest are allowed on their value at a certain percentage, maintenance becomes a separate item of expense and as such enters into the expenses of production. When treated as a separate item, it may, of course, enter into the expense in many different ways. The total maintenance for the year of all the horses needed for the work on the farm may be charged up to the total product, or it may be divided equally either among the total acres under cultivation or among the total acres in the farm, etc. For the purposes of this investigation the latter method has been used except when wages was paid for team work. The reasons for this are that it was considered the most convenient as well as the most just method. By dividing the total yearly expense among the total acres in the farms the expense per acre was easily ascertained. The horses are seldom used for anything but farm work. The expense of their maintenance therefore must be borne by the farm, and as the land not under cultivation also shares in their work, as a rule, it is only fair that it should also share in the expense of maintenance.

Fertilizing: The productive power of the soil is mostly kept up by the rotation with clover and the application of barnyard manures. The expense from the use of clovers is small. Barnyard manures when produced on the farm cost but little more than the work involved in caring for it and of hauling and spreading upon the land. From two to three loads per acre seemed to be about the yearly product of manure. This item is later explained more fully.

Other expenses: In this item is included various expenses that are involved in production on the farm which could not properly come under either of the above heads. Among these expenses are the cost of binding twine, and fuel in threshing, also the expense arising from the loss of time through bad weather, etc. These expenses were by most farmers placed at 50 cents per acre. As their estimates were supported by what appeared good reasons they were adopted here.

Depreciation: By this is meant simply the wear and tear or using up of the fixed capital in production. The amount of this wear and tear must be replaced out of the receipts from the products and is therefore included in expenses. When horses, or their value, were treated as an investment, depreciation was also allowed on the value of horses. In each case the rate of depreciation as estimated by the farmers was, as a rule, accepted.

Interest on capital invested: This is an item of expense which must be met by the farmers. The capital consists of the amount invested in land, including permanent improvements on same, the amount invested annually in raising the crops, the amount invested in machinery and tools, and the amount invested in horses. The average rate on money secured by land was found to be a small fraction over 6 per cent., hence this rate was used. When wages was paid for team work interest was not allowed on value of horses.

Under one or the other of the above heads are explained the sources from which the expenses of producing the crops included are derived, and the method of computing these expenses. With the exception of such outlays as may be found necessary to keep fences and buildings in repair and to cover insurance against fire, accidents, etc., also a sum for wages of superintendence or necessary profit, all expenses directly or indirectly incurred in growing the crops have been included. If the farmers are to come out whole, that is, get back the amount of their annual investment and over and above this, a sum equivalent to interest on same and to interest and depreciation of their fixed capital, the total value of the crops produced must in any event, be at least large enough to counterbalance the sum of these expenses. And if besides, the farmers are to receive any compensation for their efforts and troubles of superintendence or management the value of the crops must exceed these expenses. In order that the receipts may also be fully understood, a brief explanation relating thereto will follow.

The products, the value of which constitute the receipts, consist of the grain and the accompanying straw and stalks. Compared, in this respect, with the outlays, the receipts are easily ascertained. Especially is this true when the products are sold directly in the market. In practically all markets the prices of the grain are regularly published and complete records of the same are therefore easily available. While of by-products this is not usually the case, experience soon familiarizes one with their value for the uses to which they are put. When the products are utilized as the raw material for beef and dairy products their value becomes more involved. But with their value in such cases we are not concerned here since the investigation is limited to a comparison of cost and value when the products are disposed of directly. It can be said, however, that inquiries upon this point revealed the fact, that the farmers generally regard corn and oats as worth, at least, one-third more to them when turned into beef and dairy products than when sold at such prices as were paid in the market throughout 1896 and during the first three or four months of 1897. As already intimated the products of the crops included consist of the grain and the accompanying straw and stalks.

Grain: In each instance the farmers were requested to give the yield per acre in bushels and the price paid per bushel when delivered in their local market or where sold. The yield and price thus given by the farmers are shown, and from this has been computed the value per acre. It will be noticed that the yield and price given here do not quite correspond to the average shown in crop reports. The reasons for this are almost too obvious to mention. The crop reports show the average yield for the whole state and the average price for the whole year in our grain centers, while these tables show only the yield of those reporting and price actually obtained in the local market where the grain was sold.

Straw and stalks: The straw and stalks which accompany the grain are mostly consumed or used on the farm. Now and then quantities of these products are brought to the market; especially is this true of rye straw; but as a rule they can be used to better advantage at home. When consumed on the farm it is mostly used for feed, and for manure or bedding. In the market, rye straw often brings from $5.00 to $6.50 per ton. The farmers were asked to give the money value of the straw and most of them complied with this request. Of those who did not comply the greater proportion stated that while they found the straw valuable they could not express or measure its value in money.

It is evident, however, that straw and stalks possess considerable value and that no account of the income and expenses of farming or of raising any of the crops included is complete until these products have in some way been included. It is true that their money value is difficult to ascertain, because comparatively small quantities are sold. But those who from experience have become familiar with their qualities and the uses to which they are put are usually able to overcome this by comparing their value for certain purposes with that of some other product used for the same purpose, the commercial value of which is known. Thus, for instance, the value of straw and stalks for feed and manure may be compared to the value of hay and fertilizers. Many farmers went into detail in their efforts to show the relative value of these two classes of commodities and in their conclusions, based as they were upon experience and close observation, could not but be accepted here. Their figures also agree quite closely to those shown by scientific tests and with such information as we were able to gather from personal observations and inquiries. As a few reports were used in which the value of straw and stalks, for reasons already mentioned, were not given it became necessary to make proper corrections. In making these corrections the above facts were, of course, used as a basis, but, as a rule, the values fixed in this manner were lower than that of the reports in which the farmers' own figures were accepted. The aim was to keep within a safe limit and it can be said without hesitation that the value of straw and stalks has not been placed at too high a figure.

In order to show what has been found to be the average composition of feed and fertilizing ingredients in straw and stalks as well as the commercial value of these ingredients in concentrated form and the relative yield of straw and stalks the following tables and facts relating to this from the various reports issued by the Wisconsin Experiment Station, have been included:

Proportion of feed ingredients in straw and stalks.

Classification.	Water.	Ash.	Crude protein.	Ether extract fat.	Nitrogen free ext.	Crude fibre.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Wheat straw	9.6	4.2	3.4	1.3	43.4	38.1
Oat straw	9.2	5.1	4.0	2.3	42.4	37.0
Rye straw	7.1	3.2	3.0	1.2	46.6	38.9
Barley straw	14.2	5.7	3.5	1.5	39.0	36.0
Corn stalk	....	....	3.8	1.1	31.9	19.7

The figures in the above table have been taken from the Thirteenth Annual Report of the Experiment Station of Wisconsin, and shows the average composition of the straw and stalks included as feed stuff. Of the ingredients in this table all but water and ash have a commercial value. In the Tenth report of the Wisconsin Station, their cost in concentrated feed stuff is as follows: of one pound of crude protein 1.6 cents; of one pound of ether extract 3.4 cents; of one pound of nitrogen free extract .48 cents; of one pound of crude fibre .24 cents. Two pounds of straw or stalks are usually allowed for one pound of grain but the actual proportion of straw is usually above this figure; especially is this true of rye and oats.

Fertilizing constituents in wheat, oats, rye and barley straw and also in corn stalks.

Classification.	Ash.	Nitrogen.	Phosp. acid.	Potash.
	Per cent.	Per cent.	Per cent.	Per cent.
Wheat straw	3.81	.59	.12	.51
Oat straw	4.76	.62	.20	1.24
Rye straw	3.25	.46	.28	.79
Barley straw	5.30	1.31	.30	2.09
Corn stalks	8.74	1.04	.29	1.40

The above table, while it resembles the one next preceding it and has been compiled from the same reports, differs from it in many respects. The first table shows the percentage of food ingredients in the products included. This table shows the percentage of fertilizing ingredients in the same products. Among other differences may be noticed the variation in the quantities of the two kind of ingredients contained. As has been shown under fertilizing these ingredients also have a commercial value. In the reports above referred to these values are shown to be of nitrogen 12 cents per pound; of phosphoric acid 5 cents per pound; of potash 4.5 cents per pound.

To determine the yield of straw to the acre is not easy. From various estimates in the different reports it would seem that two pounds of straw to one of grain has been considered a fair proportion. This is probably also as nearly correct as it is necessary to come to it for most purposes. The estimates of many farmers on this point, however, indicate that of rye, oats, and even of corn, the proportion of straw or stalks is rather above than below the above figures.

As said, the receipts to the farmers from the crops included consist of the value of the grain and straw grown. It may be urged that the land or stubble, after the grain is cut and removed, is worth something for pasturing purposes. Inquiries upon this point, however, revealed the fact, that by far the greater proportion of those who reported did not regard the stubble as worth anything to them or for pasturing. In most cases it seemed to have been plowed up almost immediately after cutting. Then again there is little or nothing left, after the grain is taken away, for the cattle to feed on. Those who considered the stubble as worth something, seldom placed its value above 25 cents an acre. Besides these facts, it is even doubtful whether the value of the stubble—if it has any—should be credited to the products. Considering what has been said it was thought best not to take any account whatever of this item. The elements of cost and value which have thus been briefly discribed will be more fully explained later.

The investigation is based upon the data compiled from 1,510 reports. This data has thus served as a basis or foundation. In the tables, it is presented separately, usually ahead of the calculations which have been made upon it, but in such a way that the relations between the two is readily noticed. Thus pages 34 to 91, inclusive, contain the complete presentation of 40 reports. In the first four pages in order we find, in detail, the most important data. In the next four pages this data is briefly explained and summarized. Following this are the calculations with summaries and explanations of same. Of these, ten pages have been devoted to each of the five crops—six, in each case to the details of outlays and receipts per acre and four to summarizing, etc.

Pages 92 to 149, inclusive, contain the complete presentation of 400 reports. In this the same method and order as in the above presentation have been observed, in fact, the two differ only in the number of reports used.

Pages 150 to 156, inclusive, contain the complete presentation of 70 reports and show the cost of production and value of products of 1,000 acres of each crop. In this presentation all detail figures, whether relating to the basis data or to the calculations, were omitted.

Pages 157 to 193, inclusive, contain an analysis of all the basic data thus far presented, and show the average cost and value per acre as computed from same. In these pages much of what has already been said is repeated, but it was thought necessary to do so in order to bring out the whole effect.

Pages 194 to 196, inclusive, contain the complete presentation of the data of 1,000 reports and of the cost of production per acre as computed from this data.

FERTILIZING.

The term fertilizing in this investigation is used in a sense of the expenses involved in maintaining the productive power of the soil. It is a common experience on practically all farms that when a few crops have been taken off of a piece of land, without making any returns to it, the yields are gradually growing smaller until finally, if this course is kept up, they decrease to such an extent that it no longer pays to cultivate the land. On good, and generally on new soil, this change in the condition of the land is less sudden, but in all cases it is sure to take place. For the cause of this inevitable result it is only necessary to question the soil. If this is done properly it will soon be discovered that the account with it has been overdrawn and that new drafts will not be honored until covered by new deposits, or in other words, that the plant food in it is exhausted. In the composition of the soil are found a large number of elements possessing different characteristics. Many of these are essential to plant life; in fact, no growth is possible or can be developed unless they are present in available forms. By the growing crops these elements are absorbed from the soil and by some system of cell building or natural processes tranformed into substances which serve as food for both man and animal.

The amount thus taken away from the soil varies with the crop. Some require more, others less. But by all there is a demand for these elements, which if a good yield is to be obtained, must be met. Most of the elements thus required are supplied in the soil from natural sources. But others, such as nitrogen, phosphoric acid, and potash, while often present in the soil in quantities sufficiently large to meet the needs of several crops, have few such sources of supply; especially is this true of such mineral elements as phosphoric-acid and potash. When, therefore, under otherwise normal conditions there is a sharp decrease in the yields, the probabilities are that either one or more of the above three elements are lacking or exhausted by the crops. In such cases the fertility of the soil may be restored by applications of the elements wanted, and this is also the practice on the farm. From this it appears that the problem of keeping the soil productive is mainly one of supplying it with the necessary amounts of nitrogen, phosphoric acid and potash.

The methods by which these elements are furnished vary somewhat with the soil and locality. Soils which are rich in plant-food need less from outside sources than poor soils. Then, again, a certain kind of fertilizing may be more easily obtained than others; or, perhaps, better suited to the soil. The popular idea, however, seems to be to keep as much stock as can be maintained on the farm and to return their voidings or manure to the soil. Short rotations with clover the second growth of which, one or two years from seeding, is sometimes plowed under, is also largely practiced. Commercial fertilizers are used only occasionally. As barn yard manure, especially if well cared for, and clovers contain large quantities of plant food, it is very likely that with these alone the land may be kept in good condition.

To ascertain the cost of keeping the soil productive by these means is very difficult even to the farmers themselves. While less expensive than commercial fertilizers they still constitute a large proportion of the expenses on the farm. In preparing, caring for, hauling and spreading barn-yard manure upon the land much labor is involved, which at the ruling rate of wages would amount to quite a sum. To this should also be added the value of the material used for bedding. In clovers or green manuring there is at least the loss of the second growth for feeding purposes, when this is plowed under, to be taken into account. These are the principal factors the farmers took into consideration in estimating the average actual cost per acre of manuring. About 90 per cent. of the farmers reporting thus placed the annual expenses per acre at from 50 cents to $1.50,. the average being about 70 cents. The figures given by the remaining 10 per cent. varied greatly; by some the annual cost per acre was placed as high as $10; by others as low as 25 cents. There were strong evidences of errors, however, in these reports and their figures were therefore corrected. As all the figures and other facts bearing upon this which were submitted by the farmers were examined, verified and corrected with special care, the results as they appear in this investigation, if not absolutely correct are as nearly so as any that can be obtained.

The United States Department of Agriculture as well as the different state agricultural experiment stations, have, in the interest of scientific farming, conducted valuable experiments along the lines discussed in this part. The results of these experiments are published in their reports, and show among other things, the amount of plant food found in the different soils, the amount carried away in the crops and the amount found in various kinds of fertilizers through which it is returned to the soil. As these experiments were conducted under the direction of well known scientists who are experts in their line, the results are reliable and may be safely used as a basis for further deductions.

In order to furnish those who desire either to continue the study of this subject further, or to compare our figures with those which may be computed from the results of the different experiments, with some of the material essential for this purpose, a few facts from these experiments have been used here.

As to the amount of plant food in the land the experiments reveal the fact that ordinary good soil may be expected to contain from .1 to .2 per cent. of nitrogen, from .1 to .4 per cent. of phosphoric acid and from .1 to .6 per cent. of potash. Since one acre of such soil, one foot deep, will weigh approximately 3,600,000 pounds it must contain at least 3,000 pounds each of nitrogen and phosphoric acid, and from 3,000 to 6,000 pounds of potash or plant food enough for nearly one hundred average crops of wheat. They also show that there are large quantities of these elements in the subsoil.

These facts indicate the amount of plant food that is likely to be found in most soils of average quality and suggests its great importance to the farmers. As only a portion of this plant food is, as a rule, available to the crops and no process seems to have been devised by which the amount or proportion of this part can be ascertained, and as the relative amount of the different food elements greatly vary between the different soils, it is impossible to determine its exact value. Its money-value, even that of the quantity contained in one acre only, would amount to quite a sum if measured in the prices paid for the corresponding ingredients in commercial fertilizers. To the farmer it constitutes a kind of reserve fund upon which heavy drafts may be made, often even without impairing the productive power of the soil. The value of this fact alone, especially under unexpected or adverse circumstances, is great. By improved or proper methods of cultivating the soil it is also possible, in most cases, to considerably reduce the proportion of it which is not available to the crops, and it is often cheaper to secure plant food for a particular crop by these means than by the application of fertilizers.

In all methods of keeping up the fertility of the soil it should therefore receive the fullest consideration. How to best utilize these vast resources is largely a financial question which experience alone can solve. It would seem, however, that to draw too heavily on them is bad policy. On the other hand it is questionable whether good management would, in all cases, advise the application of fertilizers on soils which already possess an abundance of plant food for the demands to be made upon it.

Having seen what is likely to be the amount of plant food in the soil as well as some of the effects of these valuable deposits upon the cost of keeping up the soil's productive power, a brief inquiry into the demands that probably will be made upon it may be in order. In the "Year-Book" for 1895 of the U. S. Department of Agriculture is a table showing the average composition of plant food in the different crops in this country, and from this the following figures relating to the crops included in this investigation have been taken.

Percentage of Nitrogen, Phosphoric Acid and Potash in the different crops.

(From Year Book, 1893, U. S. Department of Agriculture.)

CROPS.	NITROGEN.		PHOSPHORIC ACID.		POTASH.	
Classification.	Grain.	Straw.	Grain.	Straw.	Grain.	Straw.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Corn—Indian	1.82	1.01	.70	.29	.40	1.40
Wheat, Ave., spring and winter	2.36	.59	.79	.12	.50	.51
Oats	2.06	.62	.82	.20	.62	1.24
Barley	1.51	1.31	.79	.30	.48	2.09
Rye	1.76	.46	.82	.28	.54	.79
Clover--Red--Hay	....	2.07	....	.38	....	2.20
Timothy Hay	....	1.26	....	.53	....	.90

The above table shows the percentage of nitrogen, phosphoric acid and potash in the grain and straw respectively of corn, wheat, oats, barley and rye, also in clover and timothy hay. It will be noticed that the different crops contain different quantities of these ingredients and in different proportion. Of nitrogen and phosphoric acid the largest percentage is generally found in the grain; of potash in the straw. Clover hay contains nearly twice as much plant food as timothy hay.

The amount of plant food thus found in the crop has been taken from the soil. Some crops are rich in one element, while others contain more of some other element and again some crops are powerful feeders and with their strong and deep growing roots able to absorb plant-food and thrive where others would starve for want of nourishment. In the method of fertilization to be adopted, these facts, as well as the character of the soil and the amount of plant-food already in it, should receive consideration. These are also found among the main reasons why adopting rotation of crops is beneficial. When the same crop is grown on the same land for a number of years there is a constant draft upon the same elements, and the soil is much more quickly exhausted than if other crops requiring different elements had been substituted for it in intelligent rotation. Rotation is also important for other reasons. It may be made to destroy noxious weeds, to improve the physical conditions of the soil, to distribute the farm labor more evenly during the year and to economize the use of plant-food, even to increase it; facts too well known to need an explanation.

A more comprehensive view of the amount of plant-food carried away from the soil, may be had by computing it into pounds. This has therefore been done. The results appear in the following table:

Showing the amount of plant food in the different crops.

Corn—30 Bushels.

Classification.		Nitrogen.	Phosphoric acid.	Potash.
		Lbs.	Lbs.	Lbs.
Grain, 30 bushels	1,800 lbs.	32.76	12.60	7.20
Stalk	3,000 lbs.	31.20	8.70	42.00
Total	4,800 lbs.	63.96	21.30	49.20

Wheat—17 Bushels.

Grain, 17 bushels	1,020 lbs.	24.07	8.06	5.10
Straw	3,000 lbs.	11.80	2.40	10.20
Total	3,020 lbs.	35.87	10.46	15.80

Oats—30 Bushels.

Grain, 30 bushels	960 lbs.	19.78	7.87	5.95
Straw	2,000 lbs.	12.40	4.00	24.80
Total	2,960 lbs.	32.18	11.87	30.75

Barley—25 Bushels.

Grain, 25 bushels	1,200 lbs.	18.12	9.48	5.76
Straw	2,000 lbs.	26.20	6.00	41.80
Total	3,200 lbs.	44.32	15.48	47.56

Rye—14 Bushels.

Grain, 14 bushels	784 lbs.	13.70	6.43	4.23
Straw	2,000 lbs.	9.20	5.60	15.80
Total	2,784 lbs.	22.90	12.03	20.03

Hay—Clover and Timothy.

Red clover	3,000 lbs.	62.10	11.40	66.00
Timothy	3,000 lbs.	37.80	15.90	27.00

According to the foregoing table the total of the three elements removed from one acre by the grain and straw or stalks, of the yield indicated, of the different crops is as follows: by 30 bushels of corn 134.46 pounds; by 17 bushels of wheat 61.63 pounds; by 30 bushels of oats 74.80 pounds; by 25 bushels of barley 107.36 pounds; by 14 bushels of rye 54.96 pounds. In a crop of 3,000 pounds of clover hay 139.50 pounds of these elements are removed while the same yield of timothy hay removes 80.70 pounds. These crops are among the most exacting and cannot be raised profitably on land where there is not plenty of available plant-food.

Of the cereals, corn requires the most. Barley and oats are next in order. While oaths require more nourishment than wheat it is a stronger plant and may do well on land on which wheat could not be raised in paying quantities. Red clover is a heavy feeder and strong digester, and is able to absorb plant-food that would be of little value to the cereals.

It also absorbs large quantities of nitrogen from the air and on the whole leaves more plant-food behind in roots and stubble than is carried away in the hay. If desirable to maintain the plant-food in the soil it is plain that the amount taken out in crops must be returned to it in some manner.

As has already been said those who reported accomplished this by barnyard manure and short rotations of clover or similar plants. In order to furnish a comparison between the amount which may, by these means, be returned to the soil and the amount required by the different crops, the following table, showing the contents of plant-food in one ton of mixed manure and in one crop of clover, have been included.

Amount of plant-food likely to be found in one ton of mixed manure and in the tops and roots of the second growth of one acre of clover two years after seeding.

Classification.	Nitrogen.	Phosph'ric acid.	Potash.
	Lbs.	Lbs.	Lbs.
Mixed manure, 2,000 lbs	12	5	11.4
Clover, 1 acre tops and roots 2nd growth	139	68	10.0

The above table shows that one ton of mixed manure contains about 12 pounds of nitrogen, 5 pounds of phosphoric acid and 11.4 pounds of potash, and that the roots and tops of the second growth of clover two years from seeding contain about 139 pounds of nitrogen, 68 pounds of phosphoric acid and 110 pounds of potash. These figures are the average of several experiments at the different stations and are likely to be as nearly correct as possible. An analysis of the manure of milch cows would probably show a smaller amount of the different fertilizing ingredients than the above table; but of the manure from other farm animals the analysis would show larger amounts. In the analysis of the clover both roots and tops were included. The roots and stubble alone would contain about one half as much of each of the three elements as the table shows for the whole, or enough for a crop of about 25 bushels of wheat and the accompanying straw. Three loads of manure of the same quality as that in the table would on the same basis be sufficient for a crop of from 17 to 20 bushels of wheat.

In this connection it should be noticed, that clovers, while adding large quantities of nitrogen to the soil, by absorbing it from the air, do not enrich its mineral matter or the phosphoric acid and potash. The clover plant has deep growing roots which in penetrating the sub-soil gathers up the plant food in the lower strata and brings it up to the surface where it is stored in roots and stubble, and where, because the roots are quickly decomposed, it is easily accessible to succeeding crops. Clovers, however, are valuable plants. Besides thus furnishing the soil with vast stores of nitrogen from the air and carrying mineral matter from sub-soil to where it becomes available to other crops they greatly improve the physical condition of the land. Their organic matter has a good effect upon the texture of all soils, making some more retentive of heat and water and others lighter according to their character. With short rotations, clovers would supply all the nitrogen needed for good crops. By occasional applications of cheaper ingredients such as phosphoric acid and potash in form of commercial fertilizers, in addition to clovers, the productive power of the soil might therefore be fully and easily maintained.

Besides what may thus be returned to the soil in the way of plant-food by manures and clovers it is well established that it absorbs annually from the air and rain large quantities of nitrogen. In fact, it is generally held, and with good reasons, that enough nitrogen is secured from these sources alone to supply, at least, one-third of the amount needed by the crops. As to the amount of manure produced definite data could not be obtained in all cases. About 50 per cent. of those who reported gave the average annual output on their farms. From this it appears, however, that the yearly product may safely be placed at fully two and one-half loads—one load being equal to one ton—to each acre under cultivation. That this estimate is not likely to be far out of the way may be seen from the fact that of the 50 per cent. of the whole who reported as to this, the average number of loads to the acre cultivated was found to be 2.71. The value of the labor involved in handling and spreading the manure was, by over 75 per cent. of those reporting, placed at from 15 to 50 cents per load. The second growth of clover which is usually plowed under the second year from seeding is, of course, of some value as feed but in, say a three year rotation, the yearly value per acre would not be great. From the facts thus presented, however, it certainly appears that it is quite possible, by the methods in question, not only to keep the soil productive, but that this may be done at a cost not exceeding that charged to each crop in this investigation.

As already intimated there are other sources of plant-food than those discussed. The elements needed for plant growth are found stored in nature in rocks, soils and various other deposits as well as in the refuse of many manufacturing industries. These substances are placed upon the market and sold under the name of commercial fertilizers. The tremendous increase in this country in the manufacture and sale of this kind of fertilizer during the last twenty or thirty years would seem to indicate that they may be used to advantage under some system of farming. In their favor it is said, that, being concentrated, they may be handled cheaper and much more easily than manures; that they may be more fully adjusted to the demands of the crops; that they produce a sweeter or better fruit; that they are quick acting and can be applied at the right time or when they will be of the greatest benefit to the crop. While many of these points are disputed, the fact still remains that commercial fertilizers are, in many respects, superior to other forms of fertilizers. Whatever their advantages, however, they seem to be more than offset in price. Many farmers find them too expensive for low priced crops such as the cereals, etc. At least, this was the reason given in nearly every instance, by those who reported, for mainly adopting other means of keeping their land in good condition. As to their prices there are, of course, great variation depending upon the market. From present quotations it appears that nitrogen may be had for 12 cents per pound and phosphoric acid and potash for 5 and 4.5 cents per pound respectively.

Price of fertilizing ingredients in commercial fertilizers.

Classification.	Price per pound.
Nitrogen	12 cents.
Phosphoric acid	5 cents.
Potash	4.5 cents.

Here we see the approximate commercial value of fertilizing ingredients. Nitrogen, at least when compared with the other elements, appears rather expensive, its price being nearly three times that of phosphoric acid and potash. From the analysis of clovers it was seen, that these are especially rich in nitrogen and that besides furnishing hay, they deposit large quantities of this element in the soil, in short rotations, enough for the intervening crops. As a crop of clover hay is about as valuable as a crop of cereals it would seem from these facts that it is rather poor economy or management on the part of the farmers to buy the nitrogen, needed for fertilizing, in the market. When studied in connection with the other tables and facts shown in this part the above table will be found interesting, because by its aid, the value of the plant food in the soil as well as of the amount carried away in the crops and of what is brought back to the soil may be ascertained. Computed on this basis, the total money value of these three ingredients taken away from the soil in this state in 1896 by the six crops included amounted to about forty-five million dollars.

With the proportion of plant food in the grain and straw, practically the same as in the preceeding tables and the yield, as shown in the report of the state census in 1895, the five crops included in this investigation absorbed that year about 187 million pounds of nitrogen, 65 million pounds of phosphoric acid and 167 pounds of potash.

The largest quantity is charged against oats, with corn a close second. Next in order are barley, wheat and rye. Oats was also by far the biggest crop that year, covering 46 per cent. of the area devoted to these five crops in the state. Corn covered 26 per cent. and the other three crops about 11, 10 and 7 per cent. in the order given. While corn covered only a little more than half the area only it required nearly as much plant-food as oats, and together these two crops covered 72 per cent. of the area and about 71 per cent. of the plant-food used.

Barley, wheat and rye together thus covered only 28 per cent. of the area and about 29 per cent. of the plant-food. What has here been alluded to in a general way only is presented more in detail in the following table. While the figures given there can for reasons too obvious to mention be only approximately correct they indicate clearly enough the drafts made upon the soil by the crops included.

Amount of fertilizing ingredients carried away from the soil in this state in 1895 by the crops included.

Items.	Nitrogen. Lbs.	Phosphoric acid. Lbs.	Potash. Lbs.
Wheat	20,385,000	6,252,500	10,278,100
Corn	65,768,000	21,355,600	56,058,500
Oats	66,323,000	24,793,700	63,843,800
Rye	6,956,000	3,625,900	6,029,000
Barley	27,409,000	9,182,300	30,699,000
Total	186,841,000	65,210,000	166,908,400

The above figures represent enormous values and suggest very forcibly the fact that there are expenses to meet in farming as well as in other lines of business. Indeed, were there no other sources of plant-food than to buy it in the market, farmers, who raise mostly cereals, would likely find their lot a hard one. At the present price of most of these products the total value of both grain and straw is less than the expense of fertilizing alone. But luckily for the farmer nature even here as has been seen, comes to his assistance. By wisely directing the forces at command and good management in general the land may be kept fertile at a much lower figure.

As the preceding table shows, oats and corn are the principal products. These crops are used for food and almost wholly fed on the farm. During the past decade the area devoted to these crops has also rapidly increased. This undoubtedly confirms the fact that the farmers in this state are mostly given to cattle raising and dairying. As, according to their own estimation, oats and corn are worth about one-third more as the raw material of pork, beef, butter and cheese than in the market, this seems good business on their part.

But large as the quantity of plant-food required by the different crops appears, a glance at the following table showing the amount of plant-food produced in this state in 1895, by the farm animals included, would tend to show that the farmers ought not to find it very difficult to keep up their land without restoring to commercial fertilizers. Few farmers, however, utilize all the manure dropped by their stock. Perhaps it is not too much to say that fully one-third of it is lost to them, in one way or another.

Approximate quantities of fertilizing material voided in the state in 1895 by the farm animals included.

Items.	Nitrogen Lbs.	Phosphoric acid. Lbs.	Potash. Lbs.
Horses, etc.	65,824,000	25,143,000	22,714,000
Cows and cattle	258,346,000	39,281,000	161,656,000
Pigs	13,150,000	11,300,000	13,000,000
Sheep	10,600,000	7,700,000	18,600,000
Total	347,920,000	83,424,000	215,970,000

According to the above table the voidings of the farm animals in this state in 1895 contained in round numbers 348 million pounds of nitrogen, 83 million pounds of phosphoric acid and 216 million pounds of potash. Cows and cattle furnished nearly one-third of this, while the balance was had from horses, pigs and sheep. Compared to the quantities carried away in the grain the above figures seem large. As the figures used in computing them were rather below than above the average they are not likely to be too high. They certainly show the importance of manures and indicate, that if properly stored and utilized, the manures produced in this state would not fall very far short of supplying all the plant-food required.

We have seen the amount of plant food likely to be found in fairly good soils, the amount of plant-food carried from it in the crops and the means by which the amount thus carried away is restored to the soil. It now remains to determine the expenses of this maintenance.

As has been said fertility is maintained chiefly by the rotation of leguminous and other crops and the application of barn yard manure. In addition to this large quatities of nitrogen are annually absorbed by the soil from the air and from the water or rain. While from the facts developed much light has in a general way been thrown upon the cost, little in the way of definite figures has been shown. To ascertain the yearly cost under this method, or in other words the proportion of this cost that ought to be charged to the different crops is far from an easy task. It is true that the prices of the corresponding elements in commercial fertilizers is known, and that the cost might therefore be based upon these prices. The cost of clovers and manures, however, is much less than of commercial fertilizers. A crop of clover hay is worth about as much as a crop of grain. The plant-food stored up in its stubble and roots may therefore be said to be had for nothing. In cases where the second crop is also plowed under there is, of course, the value of this, for feed, to be taken into account. But the interval between the times when this is done seems to be so long that the yearly cost from this source is very small. As to manures, while they contain considerable plant-food and are beneficial to the soil in other respects their cost to the farmers are little more than the expense of caring for them and of hauling and spreading them upon the land. To the enitrogen obtained from natural sources there is, of course, no expense attached. From this it appears that the only expense that ought to be charged to the cost of producing the crops included for the keeping up or the depreciation of the soil, is that of the manures; and as manures when plenty of stock is kept—as is the case now in the state—cost but little more than the labor involved in caring for and applying it, this ought to constitute the basis of the expense.

In order to afford a means of comparison between the amount of plant-food carried away and restored to the soil under the systems of farming and maintenance in question the following two tables have been included:

Amount of fertilizing elements and value of same in each of the different crops included.

Classification of crops.	Nitrogen, Lbs.	Phosph'ric acid. Lbs.	Potash. Lbs.	Value in com. fert.
Clover — Hay ....3,000 lbs.	62.10	11.40	66.00	$10.99
Corn ....30 bush.	63.96	21.30	49.20	10.95
Oats ....30 bush.	32.18	11.87	30.75	5.83
Clover — Hay ....3,000 lbs.	62.10	11.40	66.00	10 99
Wheat ....17 bush.	35.87	10.46	15.30	5.52
Barley ....25 bush.	44.32	15.48	47.56	8.24
Rye ....14 bush.	22.90	12.03	20.03	4.25
Total..................................	323.43	93.94	294.84	$56.77

In this table it appears that seven crops, two of clover hay and one each of corn, oats, wheat, barley and rye absorbed from each acre of soil 323.43 pounds of nitrogen, 93.94 pounds of phosphoric acid and 294.84 pounds of potash; and that the total value of these elements at the prices paid for them in commercial fertilizers is $56.77 or $8.77 yearly. This then constitutes the amount of plant-food that in this case would have to be returned to the soil in order to maintain its productive power or in order to avoid drawing too heavily, or at all, upon its original resources.

This draft is supposed to be covered by the amount returned from the sources mentioned as shown in the following table:

Amount and value of fertilizing elements brought back to the soil from various sources.

Classification.	Nitrogen Lbs.	Phospho'ic acid. Lbs.	Potash Lbs.	Value of these elements in com. fert.
Two crops clover—stubble and roots	100	50	90	$18.55
18 loads manure—2.5 loads per A, yearly..	180	90	198	39.33
Natural sources—rain and air	108	....	....	12.00
Total...............................	424	140	288	$69.88

From this table may be seen the amount of plant-food likely to be returned to the soil, in the stubble and roots of two crops of clover, in eighteen tons or loads of stable or barn yard manure, and from natural sources, or the amount of nitrogen absorbed by the soil from the rain and air during a period of seven years. The stubble and roots of one acre of clover will contain from 40 to 60 pounds of nitrogen, 20 to 30 pounds of phosphoric acid and 40 to 50 pounds of potash. Eighteen tons of mixed manures contains about 216 pounds of nitrogen, 90 pounds of phosphoric acid and 198 pounds of potash. It is generally conceded that about one-third of the nitrogen needed by the crops is absorbed from water and air. In that case the amount thus obtained from natural sources, during the seven years or crops covered by the above two tables would be 108 pounds. The table also shows that total plant-food to one acre from these sources is 424 pounds of nitrogen, 140 pounds of phosphoric acid and 288 pounds of potash and that the value of these elements at the prices paid for commercial fertilizers is $69.88 or almost $10 to each acre.

The above two tables may thus be said to represent the outgo and return of plant-food upon the land. In comparing their totals the difference between the two sides is readily seen. Under the conditions given more nitrogen and phosphoric acid would be returned to the soil than taken out of it by the crops and of potash the amount would about balance. But these differences may be offset by larger yields and other causes.

While the figures given above are correct averages of many analyses made at the different experiment stations it cannot possibly be claimed for them that they, even at best, more than approximately represent actual conditions. So much in this respect depends upon correct tilling of the soil, the care given to farm animals and manures, climatic and other conditions that no absolutely definite rules and facts can be given. One conclusion, however, it would seem might be safely drawn and that is that with a rather moderate rotation of clover and with from two to three tons of good manure to the acre yearly, the productive power of the soil in all grain, mixed or dairy farming may be fully maintained.

As to the cost of this maintenance opinions, as has been seen, differ. The value of the plant-food in a ton or load of manure at prices paid for commercial fertilizers is somewhat above $2.00. On this basis, with an average of two and one half loads to the acre, the cost of the same would be $5.00. A few farmers also placed it at this figure. A much larger proportion of the farmers, however, thought this basis too high, giving it as their reason for this opinon that the returns from the use of the manure do not even warrant a valuation of 30 per cent. of this unless perhaps when so situated that the best use possible could also be made of all other by-products on the farm such as straw and stalk, etc. On this basis the cost of two and one-half loads of manure would be $1.50. Over 50 per cent. of the farmers gave only the labor cost of hauling and spreading and this last was therefore mostly used in the following tables:

TABLE I.—*Data upon which the cost of production and value as shown in tables 4, 8, 12, 16 and 20 are based.*

WHEAT.

OFFICE NUMBER.	PLOWING.		HARROWING AND SEEDING.		CUTTING.		SHOCKING AND STACKING.			
	Time and wages man and team.		*Time and wages man and team.*		*Time and wages man and team.*		*Time and wages one man.*		*Time and wage 2 men and team.*	
	Hours worked.	Wages per hour.	Hours worked	Wages per hour.	Hours worked.	Wages per hour.	Hours worked.	Wages per hour.	Hours worked.	Wages per hour.
1..........	5	20c	3 1-4	20c	1	25c	1 1-3	12c	1 5-8	32c
2..........	4	35	3	30	1	30	2	15	2	45
3..........	3 1-3	30	2	27 1-2	1	30	1 2-4	12	1 11-19	38
4..........	3 2-5	25	3	21	1	25	1	10	1 1-4	32
5..........	4	25	2	25	1	25	1 4-15	15	1 5-8	40
6..........	4	20	2 1-4	20	9-10	20	1	10	2	30
7..........	3 1-3	30	3 1-2	22	2-3	30	1	15	1 10-37	37
8..........	5	20	2 1-2	20	1	25	1 1-3	15	2	35
9..........	5	15	4 1-5	15	1 2-3	15	1 1-5	10	1 17-25	25
10..........	6 2-5	25	3 3-5	25	1 1-5	25	1 2-3	12	1 24-37	37
11..........	5	27	2 1-2	27	1	27	1 2-5	15	1 3-7	42
12..........	5	20	3 1-4	20	3-4	20	2	10	2 1-2	30
13..........	5	30	2 2-5	30	1	30	2	12 1-2	1 2-3	42
14..........	3 2-7	35	3 1-3	32	1 2-7	45	1	13	1	42
15..........	5	20	2 1-2	20	1	20	1 3-4	12	1 11-16	32
16..........	6 2-3	30	3 3-5	30	1 1-2	30	1 1-5	15	1 2-9	45
17..........	5	20	2 3-4	20	1	20	1 1-10	10	1 3-5	30
18..........	5	20	2	20	1	20	1	10	1 4-15	30
19..........	5	25	3	25	1	27	1	10	1	35
20..........	5	20	3 1-2	20	1 1-2	20	2	11	2	31
21..........	4	30	2 1-5	25	1	30	1	13	1 1-3	38
22..........	4 1-2	27 1-2	2 2-3	24	1	27	1	12	1 1-4	34
23..........	5	27 1-2	3 1-4	25	1 1-4	30	1 2-3	12 1-2	2-3	37 1-2
24..........	4	30	3 1-4	30	5-6	30	1 1-4	12 1-2	1 2-3	42 1-2
25..........	5	20	2 5-6	20	1	20	1 2-3	12 1-2	2	32 1-2
26..........	5	20	2	25	4-5	25	2	12 1-2	2	32 1-2
27..........	5	22 1-2	2	25	5-6	25	1 2-3	11	2	33 1-2
28..........	4	25	3 1-2	20	1	25	1	12 1-2	2	32 1-2
29..........	4	25	2 3-5	25	1 2-3	25	2	12 1-2	2	37 1-2
30..........	4	25	2 1-2	25	1	30	2-3	15	1 1-4	40
31..........	5	25	2 1-2	25	1	25	1 1-4	12 1-2	1 2-3	37 1-2
32..........	5	20	3	20	1	25	1	10	5-6	30
33..........	5	30	2	30	1	30	1 1-4	15	1	45
34..........	5	25	2 2-5	25	1	25	1 1-4	10	1 2-3	35
35..........	5	20	3	20	1	20	1 2-3	12 1-2	2	32 1-2
36..........	3 1-3	25	3	22	1 1-5	25	2	12	1	34
37..........	5	22 1-2	3	21	1	25	1	10	2	32 1-2
38..........	5	25	4 1-5	25	1	25	1	13	1 2-3	37 1-2
39..........	5	25	1 5-6	30	5-6	30	2	12 1-2	2	37 1-2
40..........	4	21 1-2	2 3-5	20	1	23	1	10	1	31
Total 40 acres.	185.31	983 50	112.25	951.50	41.30	1,029	55.50	485 00	61	1,423
Average one acre.	4 62	24 62	2.80	23 80	1.32	25 50	1.39	1 21	1.53	35 6

TABLE I.—*Data upon which the cost of production and value of products as shown in tables 4, 8, 12, 16 and 20 are based.*

CORN.

OFFICE NUMBER.	PLOWING.		HARROWING AND PLANTING.				CULTIVATING.		CUTTING.	
	Time and wages man and team.		*Time and wages.*				*Time and wages man and team*		*Time and wages.*	
			Harrowing.		Planting.					
	Hours worked	Wages per hour.	Hours worked.	Wages per hour.	Hours worked.	Wages per hour.	Hours worked.	Wages per hour.	Hours worked	Wages per hour.
1	5	20c	2	20c	1 2 3	12c	6 1-4	20c	8 1-3	12c
2	4	35	2 1-2	30	1 4-15	30	6 2-3	30	5	15
3	3 1-3	30	1 2-3	30	5-6	30	5	25	1 1-5	25
4	3 2-5	25	2 6-11	22	3	12	5 1-11	22	5	10
5	4	25	2	25	1 8-25	25	6 2-5	25	4	25
6	4	20	2 1-2	20	2 1-2	10	4	20	8	10
7	3 1-3	30	1 11-15	30	17-25	17	4 2-5	25	1 3-5	25
8	5	20	1	20	1	20	8	20	5	15
9	5	15	3	15	2	10	6 2-3	15	5	10
10	6 2-5	25	1 2-5	25	5	12	3 4-5	25	5	12
11	5	27	1 1-2	27	3 1-3	15	5 1-3	27	8	15
12	5	20	1 3-4	20	1	20	6	20	5	10
13	5	30	2 2-5	30	1 3-4	12	12 1-2	12	5	12
14	3 2-7	35	2	35	1	30	5 2-3	30	1 2-3	30
15	5	20	2	20	3-4	20	5 4-5	20	7	12
16	6 2-3	30	2 2-5	30	3 1-2	15	4 1-3	30	6 2-3	15
17	5	20	3 1-2	20	1 3-5	10	5	20	6 3-5	10
18	5	20	1 1-2	20	2	10	5	20	3 3-10	20
19	5	25	2	25	2	25	5	25	5	10
20	5	20	2 1-2	20	3	10	8	20	8	12 1-2
21	4	30	1 1-2	25	2 3	25	6	25	6 3-4	13
22	4 1-2	27 1-2	2	27 1-2	1 2-3	12	6 1-2	25	10	12
23	5	27 1-2	4	25	3	12 1-2	9	25	8	12 1-2
24	4	30	2 1-2	30	1 2-3	15	8	30	7	15
25	5	20	2	20	2-3	20	8	20	7	12
26	5	20	2	20	2-3	20	10	20	10	12 1-2
27	5	22 1-2	1 1-4	22 1-2	2-3	22 1-2	7	20	7	11
28	4	25	4 1-6	25	1 2-3	12 1-2	10	25	7	12
29	4	25	1 1-2	25	3 1-3	12 1-2	8	25	8	12 1-2
30	4	25	2 1-2	25	1 1-4	25	3 3-4	25	6 2-3	15
31	5	25	1 1-2	25	1	25	5 1-3	25	8	12 1-2
32	5	20	3 1-2	20	1	20	6	20	7 1-2	10
33	5	30	3	15	3	15	12	20	7	15
34	5	25	1 1-2	25	2	10	8 3-4	25	9	10
35	5	20	2	20	1	20	8	20	10	12 1-2
36	3 1-3	25	2	22	2-3	22	6 1-4	22	1 1-4	22
37	5	22 1-2	2	22 1-2	5-6	32	10	22 1-2	1 2-3	38
38	5	25	4	25	3	12 1-2	7	20	8	12 1-2
39	5	25	2	25	2 1-2	12 1-2	10	25	7	12 1-2
40	4	21 1-2	1 1-2	22 1-2	1	20	5	20	3	20
Total 40 acres.	185.30	985 50	88.35	942 00	69	721 00	273.50	910 50	243	618 00
Average one acre	4.62	24.62	2.21	23 50	1.72	18.02	6.84	22.75	600	15.45

TABLE I.—*Data upon which the cost of production and value of products as shown in tables 4, 8, 12, 16 and 20 are based.*

OFFICE NUMBER.	SEED—QUANTITY USED PER ACRE.				Value per acre of land.	Value per acre of machinery and tools used.
	Wheat, bushels.	Oats, bushels.	Rye, bushels.	Barley, bushels.		
1	1 1-2	2 1-2	1 3-4	2	$60 00	$6 00
2	1 3-4	2 1-2	1 1-2	2	62 00	6 00
3	1 1-2	2 1-2	1 1-2	2	64 00	2 50
4	1 3-4	2 1-2	1 1-2	2	30 00	3 37
5	1 1-2	2	1 1-2	2	45 00	3 33
6	2	2 1-2	1 1-2	2	25 00	3 33
7	1 3-4	3	1 1-2	2	50 00	2 35
8	2	3	1 1-2	2 1-2	60 00	3 00
9	1 1-2	2	1	1 1-4	25 00	1 66
10	2	3	2	3	30 00	1 50
11	1 1-2	2 1-2	1 1-2	2	40 00	3 33
12	2	2 1-2	1 1-2	2	50 00	4 00
13	2	3	2	1 1-2	80 00	2 00
14	2	3	1 1-2	2 1-2	70 00	5 00
15	2	3	2	2 1-2	73 00	5 75
16	1 1-2	3	1 1 2	2	45 00	4 76
17	1 1-2	2	1 1-4	2	25 00	2 50
18	1 1-2	2	1 1-2	1 1-2	20 00	2 66
19	2	3 1-2	1 1-2	2	58 00	6 00
20	1 3-4	2 3-4	1 1-2	2	18 00	2 20
21	1 1-3	2 1-2	1 3-4	2 1-4	50 00	3 33
22	2	3	1 3-4	2 1-4	50 00	2 30
23	2	3	2	2	75 00	5 00
24	1 1-2	3	1 1-2	2	40 00	3 75
25	1 1-2	2 1-2	1 3-4	2 1-4	65 00	4 00
26	1 1-2	2 1-2	1 1-2	2	57 00	2 75
27	2	2 1 2	1 3-4	2 1-4	45 00	1 66
28	1 1-2	2 1-2	1 3-4	2	60 00	1 72
29	1 1-4	2	3	1 1-2	58 00	3 57
30	1 1-3	2 1-2	2	2 1-2	60 00	1 25
31	1 1-3	2 1-2	1 3-4	2 1-4	75 00	72
32	1 1-2	2 1-2	1 3-4	2 1-4	30 00	2 40
33	2	2 1-2	1 3-4	2 3-4	55 00	4 28
34	1 1-2	1 3-4	1 3-4	2 1-4	52 00	4 90
35	1 3-4	3	1 3-4	2 1-4	65 00	2 20
36	1 1-2	2 1-2	1 3-4	2	62 50	3 06
37	1 1-2	3	1 1-4	2 1-2	66 00	7 50
38	2	2 1-2	1 3-4	2	60 00	10 00
39	1 3-4	2 1-2	1 3-4	2 1-2	95 00	8 00
40	1 1-2	2 1-2	1 1-2	2	54 00	1 10
Total 40 acres..	67.25	104	59	84.5	$2,099 50	$146 73
Av. one acre...	•1.68	2.6	1.47	2.11	$52.49	$3.668

Table I.—*Data upon which the cost of production and value of products as shown in tables 4, 8, 12, 16 and 20 are based.*

Office Number.	Yield per Acre.									
	Wheat, bushels.		Oats, bushels.		Rye, bushels.		Barley, bushels.		Corn, bushels.	
	1896.	Average 5 years.	1896.	Average 5 years.	1896.	Average 5 years.	1896.	Average 5 years.	1896.	Average 5 years.
1	15	19	40	54	22	18	30	28	40	37
2	18	17	40	36	20	20	30	32	40	37
3	26	20	60	48	20	23	30	38	60	54
4	17	16	39	37	22	20	35	31	40	38
5	20	22	47	40	17	19	35	30	45	37
6	16	17	52	45	28	20	34	28	50	45
7	20	18	40	43	23	20	35	30	40	40
8	30	27	50	41	25	22	37	30	40	40
9	15	18	35	35	18	17	35	32	35	35
10	12	16	50	40	25	22	35	28	40	40
11	15	17	40	40	30	25	36	32	40	40
12	20	20	40	48	24	23	30	32	50	45
13	18	17	37	36	18	18	27	30	34	33
14	20	24	40	36	30	25	25	25	40	34
15	25	28	40	42	18	17	28	28	45	45
16	18	18	38	40	14	17	35	30	40	40
17	20	17	36	30	16	15	30	27	50	40
18	17	16	35	32	10	14	28	27	35	32
19	20	18	50	37	25	24	35	32	50	40
20	10	15	50	45	30	25	35	33	45	40
21	18	16	40	38	18	20	33	30	40	38
22	24	27	40	43	20	20	30	32	42	41
23	15	18	50	58	20	20	30	30	50	42
24	18	16	45	40	30	28	35	33	45	42
25	20	18	40	38	22	20	35	33	50	45
26	16	16	43	45	20	20	28	30	45	42
27	16	16	40	40	20	18	30	32	40	42
28	10	11	40	40	20	20	40	32	40	38
29	10	10	35	35	15	15	27	22	30	30
30	16	16	35	38	15	17	32	35	50	45
31	19	22	50	42	22	22	26	30	56	45
32	15	14	42	40	16	16	28	30	50	42
33	16	16	50	44	17	18	40	35	50	42
34	16	21	35	36	20	18	32	33	40	35
35	15	13	40	37	28	27	30	30	40	38
36	16	15	35	39	22	39	35	30	38	33
37	16	16	50	42	18	17	28	30	40	38
38	18	17	40	47	20	20	20	20	50	46
39	20	24	60	45	24	23	31	27	50	40
40	16	15	45	42	20	22	30	28	50	40
Total 40 acres.	702	717	1,714	1,634	842	824	1,265	1,203	1,755	1,596
Average 1 acre	17.5	17.9	42.8	40.8	21.0	20.6	31.6	30.1	43.9	39.9

TABLE II.—SUMMARY TABLE I.

On this page, in order that they may become more easily accessible to those who may desire to use them, the results in the preceding table are presented in a more convenient form than was possible in that table.

Upon this data, and that on pages 41, are based the calculations on pages 34 to 91, inclusive.

For a more complete presentation of the basic data in which the results on this page is included, see next table in order.

1. GRAIN: *Time required, wages per hour.*

Classification.	Hours 40 acres.	Hours per acre.	Wages per hour. Cents
Plowing	185.3	4.62	24.62
Harrowing, etc., seeding	112.2	2.80	23.80
Cutting	41.3	1.32	25.50
Shocking, one man	55.5	1.39	12.12
Stacking, two men and team	61	1.53	35.60

2. CORN: *Time required, wages per hour.*

Plowing	185.3	4.62	24.62
Harrowing, etc	88.3	2.21	23.50
Planting	69	1.72	18.02
Cultivating	273.5	6.84	22.75
Cutting	243	6.00	15 45

3. *Quantities of seed used.*

	Bushels 40 acres	Bushels one acre.
Wheat	67.25	1.68
Oats	104	2.6
Rye	59	1.47
Barley	84.5	2.11

4. *Value of land and machinery used.*

	Value 40 acres.	Value one acre.
Land	$2,099.50	$52.49
Machinery	146.73	3.67

5. *Yield 1896 and average for 5 years.*

	Bushels, 40 acres, 1896.	Bushels, 1 acre, 1896.	Bushels, 40 acres 5 years.	Bushels, acre, 5 years.
Wheat	702	17.5	717	17.9
Oats	1,714	42.8	1,634	40.8
Rye	842	21.0	824	20.6
Barley	1,265	31.6	1,205	30.1
Corn	1,755	43.9	1,596	39.9

In the two precedin tables is presented the greater part of the data upon which the "cost of production" and "value of products"as shown in tables 4, 8, 12, 16, 20 have been computed.

Table I contains 40 presentations in each of which are shown, the time required and wages paid per hour for man and team or single man, as the case may be, for plowing, harrowing, and seeding, cutting, shocking, stacking one acre of grain, and for plowing, harrowing, planting, cultivating, cutting one acre of corn; the quantity of seed used per acre in each case of wheat, oats, rye, barley and the value per acre of land and machinery used; the yield per acre in 1896 and the average yield for five years of wheat, oats, rye, barley and corn.

Table II shows the totals and averages in table I. This table is divided into five sub-tables. In 1 and 2 of these sub-tables under "time required and wages per hour" are shown the total number of hours required for each class of labor on 40 acres and the average time per acre and average wage per hour; in 3 under "quantities of seed used" is shown the quantity used for 40 acres and the average per acre of each crop; in 4 under "value of land and machinery used" are shown the total value of 40 acres and the average value per acre in each case of the land and machinery used; in 5 under "yield 1896 and average yield" are shown the total yield 40 acres 1896 and the average yield per acre, the average yearly yield on 40 acres during 5 years and the average per acre of each of the five crops.

As already alluded to these two tables do not include all the data collected or used as a basis for the cost of production and value of product as shown in the tables referred to. Another table was therefore compiled which, while it presents only averages and totals, covers all points inquired about and will be found both complete and reliable. This table is divided into 7 sub-tables and is presented on the next two pages.

FACTORS OF COST AND VALUE IN PRODUCING GRAIN.

On these two pages are presented in seven sections the data from which the "cost of production" and "value of products" as shown in tables VIII–XX inclusive have been computed. This data was obtained directly from farmers. In section 1 is shown the rate of wages paid per day and month for labor and team work with or without board included. In section 2 is shown the average time needed per acre for properly performing the different parts of the work involved from the time the soil is prepared for seed until the time of threshing. Section 3 shows the data upon which the expenses of threshing, marketing and seed are based. Section 4 shows the number of acres under cultivation and not under cultivation, respectively, owned or controlled by the farmers reporting and the value per acre in each case and the average value per acre. Section 5 shows the total value of the machinery used and the value of the same to each acre under cultivation, and the total value of the horses used and the average to each acre owned or controlled. Section 6 shows the data upon which taxes, the cost of maintaining horses and the cost of fertilizing are based.

In section 7 is presented the data from which the "value of products" was arrived at or the yield in bushels per acre and the prices per bushel, also the value per acre of the accompanying straw or stalk. As regards the value of straw and stalks two estimates are given: one giving their value as compared with the commercial value of other products used for the same purpose; the other giving the value reported by the farmers.

For details of the greater part of the averages shown here see the preceding table.

1. *Wages paid per day and month.*

ITEMS.	WITH BOARD.		WITHOUT BOARD.		DIFFERENCE.	
	Day.	Month.	Day.	Month.	Day.	Month.
Man and team of two horses.	1.78	$37 20	$2.35	$52 25	....	....
Labor........................	.90	18 35	1.22	26 93	....	....
Team of two horses	.88	18 85	1.13	25 82	....	....

2. *Time needed for doing the different parts of the work involved.*

ITEMS.	Acres per day.	Hours per acre.	ITEMS.	Acres per day.	Hours per acre.
Plowing, man and team......	2.17	4.62	Planting corn, one man and team	7.62	1.32
Harrowing for grain, man and team.	5.55	1.80	Planting corn, one man, hand	3.77	2.65
Harrowing for corn, man and team	4.52	2.21	Cultivating corn, one man and team	1.46	6.84
Seeding grain, man and team	10.00	1.00	Cutting corn, two men and team	5.62	1.79
Cutting grain, man and team	9.80	1.02	Cutting corn, one man, hand	1.30	7.70
Shocking grain, one man....	7.13	1.39	Cutting corn, average Table I	1.66	6.00
Stacking grain, two men	6.50	1.53	Husking corn, one man, hand	1.03	9.70

3. *Threshing, marketing and seed.*

ITEMS.	THRESHING.			MARKETING.			SEED PER ACRE.		
	Bushels per day.	No. of men employed.	Cost per bushel for machine.	Ave. No. of miles hauling.	Loads per day.	Bushels per load.	Bushels.	Price.	
								1896.	*5 yrs.*
			cents.						
Wheat	1050	12	1.30	5.4	2.30	45	1.8	$.70	$.70
Corn, shelling	....	....	1.70	5.4	2.30	50	2.8	.35	.40
Oats.......	1750	12	.50	5.4	2.30	75	2.6	.30	.35
Rye	1050	12	1.00	5.4	2.30	50	1.6	.45	.50
Barley	1100	12	1.00	5.4	2.30	65	2.2	.40	.4

4. *Acres in farms, value per acre.*

ITEMS.	Acres under cultivation.	Acres not under cultivation.	Total, and average.
Acres controlled by the forty farmers reporting	3,549	2,372	5,920
Value per acre and average value	$52 50	$32.82	$44.5

5. *Value of machinery and horses used.*

ITEMS.	Value per acre.	Total value.
Machinery: Value per acre under cultivation and total value..	$3.67	$13,045
Horses: Value per acre controlled and total value	1.32	7,800

6. *Other items and factors of expense.*

ITEMS.	Per acre.	Total.
Taxes: Amount per acre controlled and total paid................	25.3	$14.98
Maintenance of horses: Cost per acre controlled, total cost	79.4	46.80
Manures: Loads per acre under cultivation, total loads.........	2.15	76.20
Manures: Cost per load when bought $0.85, labor cost...........	....	33 cts.
Horses: Total number used 130, average value.....................	....	$60.00

7. *Yield per acre. Price per bushel. Value of straw per acre.*

ITEMS.	YIELD. PRICE		YIELD. PRICE.		VALUE OF STRAW.	
	1896.		Average 5 yrs.		Estimated feed and fert. stuff.	Reported by farmers.
	Bush.	Cents.	Bush.	Cents.		
Wheat yield. Price value of straw	17.5	64.3	18.0	60.4	$2 48	$1 65
Corn yield. Price value of straw..	43.9	24.8	39.9	35.4	6 23	3 25
Oats yield. Price value of straw..	42.8	17.1	40.9	27 3	4 83	2 45
Rye yield. Price value of straw ..	21.	34.1	20 6	46.9	3 19	2 10
Barley yield. Price value of straw	31.4	28.7	30.	44.9	4 14	1 65

WHEAT—TABLE IV.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acres 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	1.00	6.67	1.00	5.26	.65	4.33	.65	3.42	.25	1.67	.25	1.82
2	1.40	7.77	1.40	8.24	.90	5.00	.90	5.29	.30	1.67	.30	1.77
3	1.00	3.84	1.00	5.00	.55	2.11	.55	2.75	.30	1.15	.30	1.50
4	.85	5.00	.85	5.31	.63	3.70	.63	3.94	.25	1.47	.25	1.56
5	1.00	6.00	1.00	4.55	.50	2.50	.50	2.28	.25	1.25	.25	1.14
6	.80	5.00	.80	4.70	.45	2.81	.45	2.64	.18	1.13	.15	1.06
7	1.00	5.00	1.00	5.56	.77	3.85	.77	4.28	.20	1.00	.20	1.11
8	1.00	3.33	1.00	3.70	.50	1.67	.50	1.85	.25	.83	.25	.93
9	.75	5.00	.75	4.17	.63	4.20	.63	3.50	.25	1.67	.25	1.39
10	1.60	13.33	1.60	10.00	.90	7.49	.90	5.63	.30	2.50	.30	1.87
11	1.35	9.00	1.35	7.94	.68	4.53	.68	4.00	.27	1.80	.27	1.59
12	1.00	5.00	1.00	5.00	.65	3.25	.65	3.25	.15	.75	.15	.75
13	1.50	8.34	1.50	8.82	.72	4.00	.72	4.22	.30	1.67	.30	1.76
14	1.16	5.80	1.16	4.83	1.07	5.35	1.07	4.46	.44	2.20	.44	1.83
15	1.00	4.00	1.00	3.57	.50	2.00	.50	1.78	.20	.80	.20	.71
16	2.00	11.11	2.00	11.11	1.08	6.00	1.08	6.00	.45	2.50	.45	2.50
17	1.00	5.00	1.00	5.88	.55	2.75	.55	3.23	.20	1.00	.20	1.18
18	1.00	5.88	1.00	6.25	.40	2.36	.40	2.50	.20	1.18	.20	1.25
19	1.25	6.25	1.25	6.95	.75	3.75	.75	4.17	.27	1.35	.27	1.50
20	1.00	10.00	1.00	6.67	.70	7.00	.70	4.67	.30	3.00	.30	2.00
21	1.20	6.67	1.20	7.50	.55	3.07	.55	3.44	.30	1.67	.30	1.87
22	1.24	5.17	1.24	4.59	.64	2.67	.64	2.36	.27	1.12	.27	1.00
23	1.37	9.13	1.37	7.61	.82	5.46	.82	4.56	.37	2.47	.37	2.05
24	1.20	6.67	1.20	7.50	.98	5.45	.98	6.13	.25	1.38	.25	1.56
25	1.00	6.00	1.00	5.55	.57	2.85	.57	3.16	.20	1.00	.20	1.12
26	1.00	6.25	1.00	6.25	.50	3.12	.50	3.12	.20	1.25	.20	1.25
27	1.13	7.06	1.13	7.06	.50	3.12	.50	3.12	.23	1.44	.23	1.44
28	1.00	10.00	1.00	9.09	.70	7.00	.70	6.36	.25	2.50	.25	2.28
29	1.00	10.00	1.00	10.00	.65	6.50	.65	6.50	.42	4.20	.42	4.20
30	1.00	6.25	1.00	6.25	.63	3.94	.63	3.94	.30	1.88	.30	1.88
31	1.25	6.58	1.25	5.68	.63	3.31	.63	2.86	.30	1.58	.30	1.36
32	1.00	6.67	1.00	7.14	.60	4.00	.60	4.28	.25	1.67	.25	1.79
33	1.50	9.38	1.50	9.38	.60	3.76	.60	3.76	.30	1.88	.30	1.88
34	1.25	7.81	1.25	6.95	.59	3.68	.59	2.81	.25	1.56	.25	1.19
35	1.00	6.67	1.00	7.69	.60	4.00	.60	4.61	.20	1.33	.20	1.54
36	.84	5.25	.84	5.60	.66	4.12	.66	4.40	.30	1.87	.30	2.00
37	1.13	7.06	1.13	7.53	.52	3.26	.52	3.47	.25	1.56	.25	1.67
38	1.25	6.94	1.25	7.35	1.07	5.95	1.07	6.29	.25	1.39	.25	1.47
39	1.25	6.25	1.25	6.21	.55	2.75	.55	2.29	.25	1.25	.25	1.04
40	.86	5.38	.86	5.73	.52	3.26	.52	3.48	.23	1.44	.23	1.54
Total 40 acres	45.13	270.51	45.13	262.17	26.46	159.92	26.46	154.80	10.68	65.03	10.68	62.85
Average one acre	1.128	6.763	1.128	6.554	.661	3.99	.661	3.89	.267	1.626	.267	1.571

WHEAT—TABLE IV, continued.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	FERTILIZING.				SEED.				SHOCKING AND STACKING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	2.50	16.67	2.50	13.16	1.01	6.73	.99	5.21	.68	4.53	.68	3.57
2	2.60	14.44	2.60	15.28	1.10	6.11	.91	5.36	1.20	6.67	1.20	7.06
3	2.50	9.61	2.50	12.60	1.05	4.03	.97	4.85	.83	3.21	.83	4.15
4	3.00	17.64	3.00	18.75	1.05	6.18	1.05	6.56	.50	2.94	.50	3.13
5	3.00	15.00	3.00	13.62	.93	4.65	.90	4.09	.84	4.20	.84	3.81
6	2.50	15.63	2.50	14.70	1.20	7.50	1.14	6.70	.70	4.38	.70	4.12
7	3.00	15.00	3.00	16.66	1.12	5.60	1.08	6.00	.60	3.00	.60	3.34
8	3.00	10.00	3.00	11.11	1.40	4.67	1.20	4.45	.90	3.00	.90	3.34
9	2.50	16.67	2.50	13.89	.90	6.00	1.00	5.56	.54	4.60	.54	3.00
10	2.50	20.84	2.50	15.62	1.30	10.84	1.20	7.50	.81	6.75	.81	5.06
11	2.50	16.67	2.50	14.70	.90	6.00	.87	5.12	.81	5.40	.81	4.16
12	3.00	15.00	3.00	15.00	1.20	6.00	1.26	6.30	.95	4.75	.95	4.75
13	2.50	13.88	2.50	14.70	1.28	7.12	1.16	6.83	.95	5.28	.95	5.59
14	2.50	12.50	2.50	10.42	1.20	6.00	1.30	5.42	.55	2.75	.55	2.29
15	3.00	12.00	3.00	10.71	1.16	4.64	1.16	4.15	.75	3.00	.75	2.68
16	2.50	13.89	2.50	13.89	.90	5.00	.90	5.00	.73	4.06	.73	4.06
17	2.50	12.50	2.50	14.70	.93	4.65	.89	5.24	.59	2.95	.59	3.47
18	2.50	14.70	2.50	15.63	.87	5.12	.86	5.37	.48	2.82	.48	3.00
19	3.00	15.00	3.00	16.67	1.28	6.40	1.18	6.56	.45	2.25	.45	2.50
20	2.00	20.00	2.00	13.33	1.14	11.40	1.02	6.80	.84	8.40	.84	5.60
21	2.50	13.89	2.50	15.63	.82	4.55	.77	4.81	.65	3.61	.65	4.06
22	2.50	10.42	2.50	9.26	1.20	5.00	1.12	4.14	.55	2.29	.55	2.03
23	2.00	13.34	2.00	11.11	1.40	9.34	1.26	7.00	.47	3.13	.47	2.61
24	1.75	9.73	1.75	10.93	.96	5.33	.85	5.31	.88	4.89	.88	5.50
25	2.50	12.50	2.50	13.89	.91	4.55	.85	4.73	.85	4.25	.85	4.73
26	2.75	17.19	2.75	17.19	.90	5.62	.87	5.43	.90	5.62	.90	5.62
27	2.50	15.62	2.50	15.62	1.24	7.75	1.16	7.26	.86	5.37	.86	5.37
28	1.50	15.00	1.50	13.64	1.05	10.50	.95	8.64	.78	7.80	.78	7.09
29	2.50	25.00	2.50	25.00	.75	7.50	.85	8.50	1.00	10.00	1.00	10.00
30	2.50	15.62	2.50	15.62	.82	5.12	.82	5.12	.60	3.75	.60	3.75
31	2.20	11.58	2.20	10.00	.88	4.63	.80	3.64	.78	4.11	.78	3.55
32	2.50	16.67	2.50	17.86	.98	6.53	.89	6.36	.35	2.33	.35	2.50
33	2.50	15.62	2.50	15.62	1.20	7.50	1.20	7.50	.64	4.00	.64	4.00
34	1.50	9.38	1.50	7.14	.93	5.81	.90	4.29	.70	4.38	.70	3.33
35	2.50	16.67	2.50	19.24	1.40	9.33	1.07	8.24	.86	5.73	.86	6.61
36	2.50	15.62	2.50	16.67	1.05	6.57	.90	6.00	.58	3.62	.58	3.86
37	1.75	10.94	1.75	11.66	.96	6.00	.93	6.20	.75	4.69	.75	5.00
38	2.50	13.89	2.50	14.70	1.50	8.33	1.20	7.05	.75	4.16	.75	4.41
39	1.60	8.00	1.60	6.66	1.05	5.25	1.02	4.25	1.00	5.00	1.00	4.17
40	2.50	15.62	2.50	16.66	1.12	7.00	.90	6.00	.41	2.56	.41	2.74
Total 40 acres	98.15	579.94	98.15	569.14	43.04	256.85	40.35	233.54	29.06	176.22	29.06	170.21
Average one acre	2.454	14.50	2.45	14.23	1.07	6.42	1.009	5.84	.726	4.40	.726	4.26

WHEAT—TABLE IV, continued.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.45	3.00	.57	3.00	.15	1.00	.19	1.00	3.60	24.00	3.60	18.95
2	.45	2.50	.42	2.50	.09	.50	.08	.50	3.72	20.66	3.72	21.88
3	.78	3.00	.60	3.00	.39	1.50	.30	1.50	3.84	14.77	3.84	19.20
4	.51	3.00	.48	3.00	.51	3.00	.48	3.00	1.80	10.69	1.80	11.25
5	.60	3.00	.66	3.00	.40	2.00	.44	2.00	2.70	13.50	2.70	12.28
6	.48	3.00	.51	3.00	.80	5.00	.85	5.00	1.60	9.37	1.50	8.83
7	.40	2.00	.36	2.00	.60	3.00	.54	3.00	3.00	15.00	3.00	16.66
8	.90	3.00	.81	3.00	.30	1.00	.27	1.00	3.60	12.00	3.60	13.33
9	.30	2.00	.36	2.00	.75	5.00	.90	5.00	1.50	10.00	1.50	8.34
10	.24	2.00	.32	2.00	.24	2.00	.32	2.00	1.80	15.00	1.80	11.25
11	.45	3.00	.51	3.00	.60	4.00	.68	4.00	2.40	16.00	2.40	14.11
12	.40	2.00	.40	2.00	.50	2.50	.50	2.50	3.00	15.00	3.00	15.00
13	.54	3.00	.51	3.00	.54	3.00	.51	3.00	4.80	26.67	4.80	28.24
14	.60	3.00	.72	3.00	.40	2.00	.48	2.00	4.20	21.00	4.20	17.50
15	.75	3.00	.84	3.00	.75	3.00	.84	3.00	4.38	17.52	4.38	15.65
16	.54	3.00	.54	3.00	.36	2.00	.36	2.00	2.70	15.00	2.70	15.00
17	.50	2.50	.42	2.47	.60	3.00	.51	3.00	1.60	7.50	1.50	8.82
18	.51	3.00	.48	3.00	.34	2.00	.32	2.00	1.20	7.05	1.20	7.50
19	.60	3.00	.54	3.00	.60	3.00	.64	3.00	3.48	17.40	3.48	19.33
20	.25	2.50	.38	2.53	.15	1.50	.22	1.47	1.08	10.80	1.08	7.20
21	.54	3.00	.48	3.00	.27	1.50	.24	1.50	3.00	16.67	3.00	16.75
22	.72	3.00	.81	3.00	.60	2.50	.68	2.55	3.00	12.50	3.00	11.11
23	.30	2.00	.36	2.00	.30	2.00	.36	2.00	4.50	30.00	4.50	25.00
24	.45	2.80	.40	2.50	.36	2.00	.32	2.00	2.40	13.33	2.40	15.00
25	.60	3.00	.54	3.00	.20	1.00	.18	1.00	3.90	19.50	3.90	21.67
26	.56	3.50	.56	3.50	.32	2.00	.32	2.00	3.42	21.38	3.42	21.38
27	.24	1.50	.24	1.50	.32	2.00	.32	2.00	2.70	16.87	2.70	16.87
28	.15	1.50	.16	1.50	.05	.50	.06	.50	3.60	36.00	3.60	32.72
29	.20	2.00	.20	2.00	.20	2.00	.20	2.00	3.18	31.80	3.18	31.80
30	.24	1.50	.24	1.50	.16	1.00	.16	1.00	3.60	22.50	3.60	22.50
31	.48	2.53	.55	2.50	.38	2.00	.44	2.00	4.50	23.68	4.50	20.45
32	.45	3.00	.42	3.00	.53	3.53	.49	3.50	1.80	12.00	1.80	12.86
33	.48	3.00	.48	3.00	.24	1.50	.24	1.50	3.30	20.62	3.30	20.62
34	.40	2.50	.53	2.50	.48	3.00	.63	3.00	3.12	19.50	3.12	14.66
35	.45	3.00	.39	3.00	.45	3.00	.39	3.00	3.90	26.00	3.90	30.00
36	.48	3.00	.45	3.00	.48	3.00	.45	3.00	3.75	23.44	3.75	25.00
37	.48	3.00	.45	3.00	.16	1.00	.15	1.00	3.96	24.75	3.96	26.40
38	.63	3.50	.58	3.42	.45	2.50	.42	2.45	3.60	20.00	3.60	21.18
39	.30	1.50	.36	1.50	.40	2.00	.48	2.00	6.70	28.50	6.70	23.75
40	.48	3.00	.45	3.00	.48	3.00	.45	3.00	3.24	20.25	3.24	21.60
Total 40 acres...	18.88	106.03	19.08	105.92	15.90	91.03	16.31	90.97	125.97	738.12	125.97	723.84
Average one acre.....	.472	2.65	.477	2.648	39.7	2.276	.408	2.267	3.149	18.45	3.149	18.09

WHEAT—TABLE IV, continued.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	4.00	.60	3.15	.25	1.67	.25	1.32	.50	3.33	.50	2.64
2	.60	3.33	.60	3.52	.25	1.39	.25	1.47	.50	2.79	.50	2.95
3	.25	.96	.25	1.25	.25	.96	.25	1.25	.50	1.93	.50	2.50
4	.34	2.00	.34	2.12	.25	1.47	.25	1.56	.50	2.95	.50	3.13
5	.33	1.65	.33	1.50	.25	1.25	.25	1.14	.50	2.50	.50	2.27
6	.33	2.06	.33	1.94	.25	1.56	.25	1.47	.50	3.12	.50	2.95
7	.23	1.16	.23	1.29	.25	1.25	.25	1.38	.50	2.50	.50	2.77
8	.30	1.00	.30	1.11	.25	.83	.25	.92	.50	1.67	.50	1.85
9	.17	1.13	.17	.94	.25	1.66	.25	1.38	.50	3.33	.50	2.77
10	.15	1.25	.15	.94	.25	2.08	.25	1.56	.50	4.17	.50	3.13
11	.33	2.20	.33	1.94	.25	1.67	.25	1.47	.50	3.33	.50	2.95
12	.40	2.00	.40	2.00	.25	1.25	.25	1.25	.50	2.50	.50	2.50
13	.20	1.11	.20	1.18	.25	1.38	.25	1.47	.50	2.77	.50	2.95
14	.50	2.50	.50	2.08	.30	1.50	.30	1.25	.50	2.50	.50	2.08
15	.58	2.32	.58	2.07	.30	1.20	.30	1.07	.50	2.00	.50	1.78
16	.47	2.62	.47	2.62	.25	1.38	.25	1.38	.50	2.77	.50	2.77
17	.25	1.25	.25	1.47	.25	1.25	.25	1.47	.50	2.50	.50	2.95
18	.27	1.68	.27	1.68	.25	1.48	.25	1.56	.50	2.94	.50	3.13
19	.60	3.00	.60	3.33	.25	1.25	.25	1.38	.50	2.50	.50	2.77
20	.22	2.20	.22	1.47	.25	2.50	.25	1.66	.50	5.00	.50	3.33
21	.33	1.83	.33	2.06	.25	1.38	.25	1.56	.50	2.77	.50	3.13
22	.23	.95	.23	.85	.25	1.04	.25	.92	.50	2.09	.50	1.85
23	.50	3.33	.50	2.78	.25	1.67	.25	1.38	.50	3.33	.50	2.78
24	.38	2.11	.38	2.38	.25	1.39	.25	1.56	.50	2.77	.50	3.13
25	.40	2.00	.40	2.22	.25	1.25	.25	1.38	.50	2.50	.50	2.77
26	.27	1.68	.27	1.68	.25	1.56	.25	1.56	.50	3.14	.50	3.14
27	.16	1.00	.16	1.00	.25	1.56	.25	1.66	.50	3.12	.50	3.12
28	.17	1.70	.17	1.54	.25	2.50	.25	2.27	.50	5.00	.50	4.55
29	.35	3.50	.35	3.50	.25	2.50	.25	2.50	.50	5.00	.50	5.00
30	.13	.81	.13	.81	.25	1.56	.25	1.56	.50	3.13	.50	3.13
31	.07	.37	.07	.32	.25	1.31	.25	1.14	.50	2.63	.50	2.27
32	.24	1.60	.24	1.71	.25	1.67	.25	1.78	.50	3.33	.50	3.57
33	.43	2.68	.43	2.68	.25	1.66	.25	1.56	.50	3.12	.50	3.12
34	.49	3.06	.49	2.33	.25	1.56	.25	1.19	.50	3.13	.50	2.39
35	.22	1.47	.22	1.69	.25	1.67	.25	1.92	.50	3.33	.50	3.84
36	.50	3.13	.50	3.33	.25	1.57	.25	1.67	.50	3.12	.50	3.33
37	.75	4.68	.75	5.00	.25	1.57	.25	1.67	.50	3.12	.50	3.33
38	1.00	5.55	1.00	5.89	.25	1.39	.25	1.48	.50	2.78	.50	2.95
39	.80	4.00	.80	3.33	.25	1.25	.25	1.04	.50	2.50	.50	2.09
40	.10	.62	.10	.66	.25	1.56	.25	1.66	.50	3.12	.50	3.33
Total 40 acres	14.64	85.38	14.64	83.36	10.10	60.50	10.10	58.77	20.00	120.13	20.00	116.99
Average one acre.	.366	2.134	.366	2.084	.252	1.512	.252	1.469	.500	3.003	.500	2.925

WHEAT—TABLE IV, continued.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 $	Acre 5 years $	Bush 5 years $
1............	11.64	77.60	11.78	62.00	2.42	16.13	2.42	12.73	10.05	.67	12.54	.66
2............	13.11	72.83	12.88	75.82	2.52	14.00	2.52	14.70	11.34	.63	10.37	.61
3............	12.24	47.07	11.89	59.45	2.76	10.61	2.76	13.60	14.00	.70	13.00	.65
4............	10.19	59.94	10.13	63.31	2.40	14.11	2.40	15.00	10.20	.60	9.60	.60
5............	11.30	56.50	11.37	51.68	3.38	16.90	3.38	15.36	12.40	.62	13.20	.60
6............	9.69	60.56	9.71	57.11	2.20	13.75	2.20	12.94	9.60	.60	9.69	.57
7............	11.67	58.35	11.53	64.05	2.31	11.55	2.31	12.83	12.80	.64	13.16	.62
8............	12.90	43.00	12.58	46.59	3.60	12.00	3.60	13.33	21.00	.70	16.20	.60
9............	9.04	61.26	9.35	51.94	2.64	17.60	2.64	14.66	9.00	.60	12.06	.67
10............	10.59	88.25	10.65	66.56	2.50	20.83	2.50	15.62	7.80	.65	9.60	.60
11............	11.04	73.60	11.15	65.58	2.60	17.33	2.60	15.29	9.00	.60	9.86	.58
12............	12.00	60.00	12.06	60.30	3.00	15.00	3.00	15.00	12.00	.60	12.60	.63
13............	14.08	78.22	13.90	81.76	2.86	15.88	2.86	16.82	11.52	.64	9.86	.58
14............	13.42	67.10	13.72	57.16	2.97	14.85	2.97	12.37	12.00	.60	15.60	.65
15............	13.87	55.48	14.05	50.17	2.60	10.40	2.60	9.28	14.50	.58	16.24	.58
16............	12.46	69.33	12.48	69.33	2.00	11.11	2.00	11.11	10.80	.60	10.80	.60
17............	9.37	46.85	9.16	53.88	2.40	12.00	2.40	14.11	12.40	.62	10.03	.59
18............	8.52	50.11	8.46	52.87	2.20	12.94	2.20	13.75	9.86	.58	9.12	.57
19............	13.03	65.15	12.81	71.16	2.30	11.50	2.30	12.77	12.80	.64	10.62	.59
20............	8.43	84.30	8.51	56.73	2.00	20.00	2.00	13.33	6.50	.65	8.70	.58
21............	10.91	60.61	10.77	67.31	2.20	12.22	2.20	13.75	10.95	.61	9.28	.58
22............	11.70	48.75	11.79	43.66	3.60	15.00	3.60	13.33	14.40	.60	15.12	.56
23............	12.78	85.20	12.76	70.88	2.60	17.63	2.60	14.44	10.60	.70	11.34	.63
24............	10.36	57.55	10.16	63.50	2.40	13.33	2.40	15.00	11.62	.64	9.12	.57
25............	11.88	59.40	11.74	65.22	2.25	11.25	2.25	12.50	13.60	.68	11.52	.64
26............	11.57	72.31	11.54	72.12	2.00	12.50	2.00	12.50	9.60	.60	9.28	.58
27............	10.63	66.41	10.55	65.92	2.20	13.75	2.20	13.75	9.92	.62	9.28	.58
28............	10.00	100.00	9.92	90.18	1.44	14.40	1.44	13.09	7.00	.70	6.93	.63
29............	11.00	110.00	11.10	111.00	3.00	30.00	3.00	30.00	6.00	.60	5.70	.57
30............	10.73	67.06	10.73	67.06	2.60	16.25	2.60	16.25	11.04	.69	11.04	.69
31............	12.22	64.31	12.27	55.77	2.64	13.89	2.64	12.00	12.64	.66	13.20	.60
32............	9.45	63.00	9.29	66.35	2.04	13.60	2.04	14.57	9.75	.65	8.26	.59
33............	11.94	74.62	11.94	74.62	2.00	12.50	2.00	12.50	9.60	.60	9.60	.60
34............	10.46	65.37	10.71	50.98	2.20	13.75	2.20	10.47	9.92	.62	12.60	.60
35............	12.33	82.20	11.88	91.38	2.64	17.60	2.64	20.30	12.00	.80	8.19	.63
36............	11.89	74.31	11.68	77.86	2.20	13.75	2.20	14.66	11.20	.70	9.00	.60
37............	11.46	71.62	11.39	75.93	2.31	14.43	2.31	15.40	10.24	.64	9.30	.62
38	13.75	76.38	13.37	78.64	2.42	13.44	2.42	14.23	13.50	.75	10.20	.60
39............	13.65	68.25	13.76	57.33	2.53	12.15	2.53	10.54	12.00	.60	13.92	.58
40............	10.69	66.81	10.41	69.40	2.40	15.00	2.40	16.00	12.00	.75	9.00	.60
Total 40 acres....	458.01	2709.6	455.93	2632.5	99.33	584.63	99.33	569.88	446.85	25.73	434.73	24.18
Average one acre.	11.450	67.74	11.398	65.81	2.48	14.62	2.48	14.25	11.17	.643	10.868	.604

WHEAT—TABLE IV, continued.

Cost of production and value of products of 40 acres of wheat.

OFFICE NO.	TOTAL VALUE OF PRODUCTS RAISED.				PROFIT.				LOSS.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1…………	12.47	83.13	14.96	78.73	.83	5.53	3.18	16.73	……	……	……	……
2…………	13.86	77.00	12.89	75.70	.75	4.17	.01	……	……	……	……	.12
3…………	16.76	80.61	15.76	78.60	4.52	33.54	3.87	19.15	……	……	……	……
4…………	12.60	74.11	12.00	75.00	2.41	14.17	1.87	11.69	……	……	……	……
5…………	15.78	78.90	16.58	75.36	4.48	22.40	6.21	23.68	……	……	……	……
6…………	11.80	73.75	11.89	69.94	2.11	13.19	2.18	12.83	……	……	……	……
7…………	15.11	75.55	15.47	74.83	3.44	17.20	3.94	10.78	……	……	……	……
8…………	24.60	82.00	19.80	73.33	11.70	39.00	7.22	26.74	……	……	……	……
9…………	11.64	77.60	14.70	81.66	2.60	16.34	6.35	29.72	……	……	……	……
10…………	10.30	85.83	12.10	75.62	……	……	1.45	9.06	.29	2.42	……	……
11…………	11.60	77.33	12.46	73.29	.56	3.73	1.31	7.71	……	……	……	……
12…………	15.00	75.00	15.60	78.00	3.00	15.00	3.64	17.70	……	……	……	……
13…………	14.38	79.88	12.72	74.82	.30	1.66	……	……	……	……	1.18	6.94
14…………	14.97	74.85	16.57	77.37	1.55	7.75	4.85	20.21	……	……	……	……
15…………	17.10	68.40	18.84	67.28	3.23	12.92	4.79	17.11	……	……	……	……
16…………	12.80	71.11	12.80	71.11	.32	1.78	.32	1.78	……	……	……	……
17…………	14.80	74.00	12.43	73.11	5.43	27.15	3.27	19.23	……	……	……	……
18…………	12.06	70.94	11.32	70.75	3.54	20.83	2.86	17.88	……	……	……	……
19…………	15.10	75.50	12.92	71.77	2.07	10.35	.11	.61	……	……	……	……
20…………	8.50	85.00	10.70	71.33	.07	.70	2.19	14.60	……	……	……	……
21…………	13.15	73.22	11.48	71.75	2.24	12.61	.71	4.44	……	……	……	……
22…………	18.00	75.00	18.72	69.33	6.30	26.25	6.93	25.67	……	……	……	……
23…………	13.10	87.33	13.94	77.44	.32	2.13	1.18	6.56	……	……	……	……
24…………	13.92	77.33	11.52	72.00	3.56	19.78	1.36	8.50	……	……	……	……
25…………	15.85	79.25	13.77	76.50	3.97	19.85	2.03	11.28	……	……	……	……
26…………	11.60	72.50	11.28	70.50	.03	.19	……	……	……	……	.26	1.62
27…………	12.12	75.75	11.48	71.75	1.49	9.34	.93	5.83	……	……	……	……
28…………	8.44	84.40	8.37	76.09	……	……	……	……	1.56	15.60	1.55	14.09
29…………	9.00	90.00	8.70	87.00	……	……	……	……	2.00	20.00	2.40	24.00
30…………	13.64	85.25	13.64	85.25	2.91	18.19	2.91	18.19	……	……	……	……
31…………	15.18	79.89	15.84	72.00	2.96	15.58	3.57	16.23	……	……	……	……
32…………	11.79	78.60	10.30	73.57	2.34	15.60	1.01	7.22	……	……	……	……
33…………	11.60	72.50	11.60	72.50	……	……	……	……	.34	2.12	.34	2.12
34…………	12.12	75.75	14.80	70.47	1.66	10.38	4.09	19.49	……	……	……	……
35…………	14.64	97.60	10.83	83.30	2.31	15.40	……	……	……	……	1.05	8.08
36…………	13.40	83.75	11.20	74.66	1.51	9.44	……	……	……	……	.48	3.20
37…………	12.55	78.43	11.61	77.40	1.09	6.81	.22	1.47	……	……	……	……
38…………	15.92	88.44	12.62	74.23	2.17	12.06	……	……	……	……	.75	4.41
39…………	14.53	72.15	16.45	68.54	.88	3.90	2.69	11.21	……	……	……	……
40…………	14.40	90.00	11.40	76.00	3.71	23.19	.99	6.60	……	……	……	……
Total 40 acres….	546.18	3157.6	543.06	2987.8	92.36	488.11	86.14	419.90	4.19	40.14	8.01	64.58
Average one acre.	13.65	78.94	13.35	74.70	2.309	12.20	2.153	10.49	.105	.100	.200	1.614

TABLE V.—SUMMARY OF TABLE VI.

In the tables on this page have been summarized the results in the foregoing tables. The tables show the total cost of producing 40 acres of wheat and the average cost per acre and bushel, the total value of products of 40 acres and the average value per acre and bushel. In the analysis of expenses, wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	40 acres, 1896.	One acre.	Bush.	40 acres, 5 years.	One acre.	Bush.
	$	$	c	$	$	c
Plowing	45 13	1.128	6.76	45 13	1.128	6.55
Harrowing and seeding	26 46	.661	4.00	26 46	.661	3.87
Cutting	10 68	.267	1.63	10 68	.267	1.57
Fertilizing	98 15	2.454	14.50	98 15	2.454	14.23
Seed	43 04	1.076	6.42	40 35	1.009	5.84
Shocking and stacking	29.06	.726	4.40	29 06	.726	4.26
Threshing	18 88	.472	2.65	19 08	.477	2.65
Marketing	15 90	.398	2.28	16 31	.408	2.27
Interest	125 97	3.150	18 45	125 97	3.150	18.09
Wear and tear	14 64	.366	2.18	14 64	.366	2.06
Taxes	10 10	.252	1.51	10 10	.252	1.47
Other expenses	20 00	.500	3.01	20 00	.500	2.93
	458 01	11.450	67.74	455 93	11.398	65.81

Value of products.

Value of grain	446 85	11.17	64.30	434 73	10.87	60.45
Value of straw	99 33	2.48	14.62	99 33	2.48	14.25
Total value	546 18	13.65	78.92	534 06	13.35	74.70

Profit and loss.

Profit	92 36	2.309	12.20	86 14	2.153	10.49
Loss	4 19	.105	1.01	8 01	.200	1.61
Balance profit	88 17	2.204	11.19	78 13	1.953	8.88

TABLE VI—COST OF PRODUCTION AND VALUE OF 40 ACRES OF WHEAT.

The data upon which the calculations in the tables on this page are based may also be found in tables 1, 2, 3. "Cost of production" is shown in table 1. "Value of products" is shown in table 2. Table 3 shows the surplus value or cost, as the case may be. In table 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	Per bushel. Cents.
1	Plowing	185 hours at 23.5 cents	$43.48	$1.087	6.06
2	Harrowing, etc	72 hours at 23.5 cents	16.92	.423	2.36
3	Seeding	40 hours at 23.5 cents	9.40	.235	1.31
4	Cutting	41 hours at 23.5 cents	9.64	.241	1.35
5	Shocking	55 hours at 12.2 cents	6.71	.168	.94
6	Stacking, man and team	61 hours at 23.5 cents	14.34	.358	2.00
7	Stacking, extra help	61 hours at 12.2 cents	7.44	.186	1.04
8	Threshing labor	82 hours at 12.2 cents	10 00	.250	1.40
9	Threshing machine	717 bush. at 1.30 cents	9.32	1.233	1.30
10	Marketing	70 hours at 23.5 cents	16.45	.411	2.29
11	Seed	72 bush. at 70 cents	50.40	.260	7.03
12	Taxes	40 acres at 25.3 cents	10.12	.253	1.41
13	Fertilizing, clover and	86 loads manure	45.00	1.125	6.27
14	Other expenses	40 acres at 50 cents	20.00	.500	2.80
15	Depreciation machinery	146,80 dollars at 10 per cent	14.68	.367	2.01
	Annual investment		$283.90	$7.097	39.60
16	Interest machinery	146.80 dollars at 6 per cent	8.81	.220	1.23
17	Interest on investment	283.90 dollars at 6 per cent	17.03	.426	2.37
18	Interest, land	1,780.00 dollars at 6 per cent	106.80	2.670	14.90
	Total cost		$416.54	10.413	58.10

Total investment $2,210.70. Average investment per acre, $55.27. Team work, 46.9 days Labor, 66.7 days. Value per acre of land, $44.50.

2. *Value of products.*

1	717 bushels of wheat at 60.4 cents; av. 5 years	$433.07	$10.82	60.40
2	40 acres of straw 1.55	62.00	1.55	8.65
	Total	$495.07	$12.37	69.05

3. *Surplus value.*

1	Surplus value—profits	78.53	1.957	10.95

Equivalent to 3.55 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising wheat.)

Annual investment		$283.90	$7.097	39,60
Machinery	$146.80 at 12 per cent	17.62	.440	2.46
Annual investment	$283.90 at 12 per cent	34.07	.852	4.75
Total expenses less rent		$335.59	$8 389	46.81
*Surplus credited to land		159.48	3.987	22.24
		$495.07	12.376	69.05

*Capitalized at 12 per cent. equivalent to $1,329.00 or $33.22 per acre. This is $11.28 per acre below the value reported by the farmers.

TABLE VII.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF WHEAT.

The data upon which the calculations in the table on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1 "Value of Product" is shown in table 2. Table 3 shows the "Surplus Value" above cost. In table 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value above the sum of these expenses. In this presentation horses, or their value, has been treated as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	Per bushel. Cents.
1	Plowing	185 hours at 12.2 cents	$22.57	$.564	3.15
2	Harrowing, etc	72 hours at 12.2 cents	8.78	.220	1.22
3	Seeding	40 hours at 12.2 cents	4.88	.122	.68
4	Cutting	41 hours at 12.2 cents	5.00	.125	.70
5	Shocking	55 hours at 12.2 cents	6.71	.168	.94
6	Stacking—labor	122 hours at 12.2 cents	14.88	.372	2.07
7	Threshing—labor	82 hours at 12.2 cents	10.00	.250	1.40
8	Threshing—machine	717 bush. at 1.3 cents	9.32	.233	1.30
9	Marketing	70 hours at 12.2 cents	8.54	.213	1.19
10	Seed	72 bush. at 70 cents	50.40	1.260	7.03
11	Taxes	40 acres at 25.3 cents	10.12	.253	1.41
12	Maintenance of horses	40 acres at 80 cents	32.00	.800	4.46
13	Fertilizing clover and 86 loads manure		45.00	1.125	6.27
14	Other expenses	40 acres at 50 cents	20.00	.500	2.80
15	Depreciation machinery	146.80 dollars at 10 per cent	14.68	.367	2.05
16	Depreciation horses	52.80 dollars at 10 per cent	5.28	.132	.73
	Annual investment		$268.16	$6.704	37.40
17	Interest machinery	146.80 dollars at 6 per cent	8.81	.220	1.23
18	Interest horses	52.80 dollars at 6 per cent	3.17	.079	0.44
19	Interest on investment	268.16 dollars at 6 per cent	16.09	.402	2.24
20	Interest land	1,780.00 dollars at 6 per cent	106.80	2.670	14.90
	Total		$403.03	$10.075	56.21

Total investment, $2,247.76. Average investment per acre, $56.19.
Team work, 46.9 days; labor, 66.7 days; value per acre of land, $44.50.

2. *Value of products.*

			40 acres.	One acre.	Per bushel. Cents.
1	717 bush. of wheat at	60.4 Cts	$433.07	$10.827	60.40
2	40 acres of straw at	$1.55	62.00	1.550	8.65
			$495.07	$12.377	69.05

3. *Surplus value.*

		40 acres.	One acre.	Per bushel. Cents.
1	Surplus value—profits	$92.04	$23.02	12.84

Equivalent to 4.09 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to land gives the value of the land for raising wheat.)

		40 acres.	One acre.	Per bushel. Cents.
Annual investment		$268.16	$6.704	37.40
Machinery	146.80 at 12 per cent	17.62	.440	2.46
Horses	52.80 at 12 per cent	6.34	.159	0.89
Annual investment	268.16	32.18	.805	4.49
Total expense less rent		$324.30	$8.108	45.24
Surplus credited to land		*170.77	4.269	23.81
		$495.07	$12.377	69.05

*Capitalized at 12 per cent. equivalent to $1,429.08 or $35.72 per acre. This is $8.78 per acre below the value reported by the farmers.

In relation to the cost of producing 40 acres of wheat as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table covering six pages, the cost per each acre in detail, the total cost of 40 acres and the average cost per acre are presented. Table 5 is made up of the totals of table 4. Table 6 is a more complete analysis of table 5 including besides the expenses of that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table 7 and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost of growing one acre of wheat as computed from table VII is shown below:

Items.	One acre.	One bush.
	$	c
Plowing	.564	3.15
Harrowing, etc	.220	1.22
Seeding	.122	.68
Cutting	.125	.70
Shocking	.168	.94
Stacking	.372	2.07
Threshing—labor	.250	1.40
Threshing—machine	.233	1.30
Marketing	.213	1.19
Seed	1.260	7.03
Taxes	.253	1.41
Maintenance horses	.800	4.46
Fertilizing	1.125	6.27
Other expenses	.500	2.80
Depreciation machinery	.367	2.05
Depreciation horses	.132	.73
Annual investment	6.704	37.40
Interest machinery	.220	1.23
Interest horses	.079	.44
Interest annaul investment	.402	2.24
Interest land	2.670	14.90
Total	10.075	56.21

OATS—TABLE VIII.

Cost of production and value of products of 40 acres of oats.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1............	1.00	2.50	1.00	1.65	.65	1.63	.65	1.21	.25	.63	.25	.47
2............	1.40	3.50	1.40	3.89	.90	2.25	.90	2.50	.30	.75	.30	.83
3............	1.00	1.67	1.00	2.09	.55	.91	.55	1.14	.30	.50	.30	.62
4............	.85	2.18	.85	2.29	.63	1.61	.63	1.70	.25	.64	.25	.68
5............	1.00	2.13	1.00	2.50	.50	1.06	.50	1.24	.25	.53	.25	.62
6............	.80	1.63	.80	1.77	.45	.87	.45	1.00	.18	.35	.18	.40
7............	1.00	2.50	1.00	2.32	.77	1.92	.77	1.79	.20	.50	.20	.47
8............	1.00	2.00	1.00	2.42	.50	1.00	.50	1.22	.25	.50	.25	.61
9............	.75	2.14	.75	2.14	.63	1.79	.63	1.79	.25	.71	.25	.71
10............	1.60	3.20	1.60	4.00	.90	1.80	.90	2.25	.30	.60	.30	.75
11............	1.35	3.37	1.35	3.37	.68	1.70	.68	1.70	.27	.67	.27	.67
12............	1.00	2.50	1.00	2.08	.65	1.63	.65	1.36	.15	.38	.15	.32
13............	1.50	4.05	1.50	4.17	.72	1.94	.72	2.00	.30	.81	.30	.84
14............	1.16	2.90	1.16	3.23	1.06	2.65	1.06	2.95		-.10	.44	1.23
15............	1.00	2.60	1.00	2.39	.50	1.25	.50	1.19	.20	.50	.20	.47
16............	2.00	5.26	2.00	5.00	1.08	2.84	1.08	2.70	.45	1.18	.46	1.13
17............	1.00	2.78	1.00	3.33	.55	1.53	.55	1.84	.20	.55	.20	.67
18............	1.00	2.86	1.00	3.13	.40	1.14	.40	1.24	.20	.57	.20	.62
19............	1.25	2.50	1.25	3.43	.75	1.50	.75	2.02	.27	.54	.27	.72
20............	1.00	2.00	1.00	2.23	.70	1.40	.70	1.55	.30	.60	.30	.66
21............	1.20	3.00	1.20	3.16	.55	1.38	.55	1.45	.30	.86	.30	.79
22............	1.24	3.10	1.24	2.88	.64	1.61	.64	1.49	.27	.67	.27	.63
23............	1.37	2.74	1.37	2.36	.82	1.64	.82	1.42	.37	.74	.37	.63
24............	1.20	2.67	1.20	3.00	.98	2.17	.98	2.45	.25	.56	.25	.63
25............	1.00	2.50	1.00	2.63	.57	1.42	.57	1.50	.20	.50	.20	.54
26............	1.00	2.32	1.00	2.23	.50	1.16	.50	1.12	.20	.46	.20	.44
27............	1.13	2.82	1.13	2.82	.50	1.25	.50	1.25	.23	.27	.23	.67
28............	1.00	2.50	1.00	2.50	.70	1.75	.70	1.75	.25	.62	.25	.62
29............	1.00	2.86	1.00	2.86	.65	1.85	.65	1.85	.42	1	.42	1.20
30............	1.00	2.86	1.00	2.63	.63	1.79	.63	1.65	.30	.75	.30	.79
31............	1.25	2.50	1.25	2.98	.63	1.26	.63	1.49	.30	.60	.30	.72
32............	1.00	2.38	1.00	2.50	.60	1.42	.60	1.50	.25	.59	.25	.62
33............	1.50	3.00	1.50	3.41	.60	1.20	.60	1.36	.30	.60	.30	.68
34............	1.25	3.58	1.25	3.48	.59	1.68	.59	1.63	.25	.71	.25	.69
35............	1.00	2.50	1.00	2.70	.60	1.50	.60	1.62	.20	.50	.20	.63
36............	.84	2.40	.84	2.15	.66	1.93	.66	1.69	.30	.87	.30	.76
37............	1.13	2.26	1.13	2.69	.52	1.04	.52	1.25	.25	.50	.25	.59
38............	1.25	3.12	1.25	2.66	1.07	2.68	1.07	2.27	.25	.62	.25	.53
39............	1.25	2.08	1.25	2.77	.55	.92	.55	1.22	.25	.42	.25	.56
40............	.86	1.91	.86	2.05	.52	1.16	.52	1.25	.23	.51	.23	.54
Total 40 acres....	45.13	107.17	45.13	112.08	26.45	63.22	26.45	65.60	10.68	25.46	10.68	26.55
Average one acre.	1.128	2.679	1.128	2.802	.661	1.580	.661	1.640	.267	.636	.267	.663

OATS—TABLE VIII, continued.

Cost of production and value of products of 40 acres of oats.

Office No.	Fertilizing.				Seed.				Shocking and Stacking.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years
	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.
1	3.00	7.50	3.00	6.55	.40	1.00	.78	1.44	.68	1.70	.68	1.26
2	2.20	5.50	2.20	6.11	.35	.88	.72	2.00	1.20	3.00	1.20	3.34
3	2.30	3.80	2.30	4.79	.40	.67	.75	1.66	.83	1.39	.83	1.73
4	2.50	6.41	2.50	6.76	.45	1.16	.65	1.76	.50	1.28	.50	1.35
5	3.00	6.38	3.00	7.50	[illegible]	.77	.52	1.30	.84	1.79	.84	2.10
6	3.00	5.77	3.00	6.66	.45	.86	.65	1.45	.70	1.34	.70	1.55
7	3.00	7.50	3.00	6.98	.54	1.35	.81	1.88	.60	1.50	.60	1.39
8	3.00	6.00	3.00	7.31	.54	1.08	.78	1.90	.90	1.80	.90	2.19
9	3.00	8.57	3.00	8.57	.40	1.14	.56	1.60	.54	1.55	.54	1.55
10	3.00	6.00	3.00	7.50	.51	1.02	.75	1.88	.81	1.62	.81	2.03
11	2.50	6.25	2.50	6.25	.45	1.13	.62	1.55	.81	2.03	.81	2.03
12	3.00	7.50	3.00	6.25	.50	1.25	.92	1.91	.95	2.37	.95	1.98
13	2.20	5.96	2.20	6.11	.45	1.21	.78	2.16	.95	2.56	.95	2.64
14	2.25	5.62	2.25	6.25	.45	1.13	.81	2.23	.55	1.37	.55	1.63
15	2.40	6.00	2.40	5.71	.45	1.13	.81	1.92	.75	1.87	.75	1.78
16	2.00	5.26	2.00	5.00	.54	1.42	.81	2.03	.73	1.92	.73	1.82
17	2.50	6.94	2.50	8.33	.32	.89	.54	1.80	.59	1.63	.59	1.96
18	2.50	7.14	2.50	7.81	.36	1.03	.52	1.63	.48	1.38	.48	1.50
19	2.50	5.00	2.50	6.75	.60	1.20	.45	2.56	.45	.90	.45	1.21
20	2.60	5.20	2.60	5.76	.44	.88	.76	1.55	.84	1.68	.84	1.87
21	2.85	7.12	2.85	7.50	.40	1.00	.46	1.19	.65	1.62	.65	1.71
22	2.80	7.00	2.80	6.51	.48	1.20	.84	1.95	.55	1.37	.55	1.28
23	2.80	5.60	2.80	4.83	.51	1.02	.81	1.39	.47	.94	.47	.83
24	1.60	3.56	1.60	4.00	.48	1.07	.84	2.10	.87	1.92	.87	2.17
25	2.00	5.00	2.00	5.26	.40	1.00	.70	1.84	.85	2.13	.85	2.24
26	2.50	5.82	2.50	5.55	.45	1.05	.39	.86	.90	2.09	.90	2.00
27	2.60	6.50	2.60	6.50	.45	1.13	.72	1.80	.86	2.15	.86	2.15
28	2.80	7.00	2.80	7.00	.45	1.12	.68	1.70	.78	1.95	.78	1.95
29	1.75	5.00	1.75	5.00	.32	.91	.54	1.54	1.00	2.86	1.00	2.86
30	2.00	5.72	2.00	5.26	.45	1.28	.70	1.84	.60	1.72	.60	1.58
31	1.65	3.30	1.65	3.93	.43	.86	.40	.95	.78	1.56	.78	1.86
32	3.60	8.57	3.60	9.00	.45	1.07	.39	.97	.35	.85	.35	.89
33	2.50	5.00	2.50	5.68	.43	.86	.65	1.48	.64	1.28	.64	1.45
34	1.80	5.14	1.80	6.00	.62	1.78	.63	1.75	.70	2.00	.70	1.94
35	2.25	6.62	2.25	6.08	.54	1.35	.84	2.27	.86	2.15	.86	2.32
36	1.75	5.00	1.75	4.48	.45	1.28	.70	1.79	.58	1.66	.58	1.50
37	2.50	5.00	2.50	5.95	.48	.96	.78	1.85	.75	1.50	.75	1.79
38	2.00	6.00	2.00	4.26	.45	1.13	.70	1.49	.75	1.88	.75	1.69
39	2.00	3.33	2.00	4.44	.38	.63	.68	1.52	1.00	1.67	1.00	2.22
40	2.50	6.56	2.50	5.95	.23	.51	.68	1.62	.41	.91	.41	.98
Total 40 acres...	98.70	234.18	98.70	244.12	17.81	42.41	27.55	68.02	29.06	68.91	29.05	72.11
Average one acre.	2.468	5.854	2.468	6.103	.445	1.060	.688	1.700	.726	1.723	.726	1.803

OATS—TABLE VIII, continued.

Cost of production and value of products of 40 acres of oats.

OFFICE NO.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years $	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	1.50	.81	1.50	.60	1.50	.81	1.50	3.60	9.00	3.60	6.66
2	.60	1.50	.54	1.50	.20	.50	.18	.50	3.72	9.30	3.72	10.33
3	.90	1.50	.72	1.50	.60	1.00	.48	1.00	3.84	6.40	3.84	8.00
4	.78	2.00	.74	2.00	.78	2.00	.74	2.00	1.80	4.61	1.80	4.87
5	.94	2.00	.80	2.00	.47	1.00	.40	1.00	2.70	6.74	2.70	6.75
6	.78	1.50	.68	1.61	1.30	2.50	1.12	2.49	1.50	2.88	1.50	3.34
7	.60	1.50	.64	1.49	.80	2.00	.86	2.00	3.00	7.50	3.00	6.98
8	.75	1.50	.62	1.51	.25	.50	.20	.49	3.60	7.20	3.60	8.78
9	.52	1.49	.52	1.49	1.05	3.00	1.05	3.00	1.50	4.29	1.50	4.29
10	.50	1.00	.40	1.00	.50	1.00	.40	1.00	1.80	3.60	1.80	4.50
11	.60	1.50	.60	1.50	.80	2.00	.80	2.00	2.40	6.00	2.40	6.00
12	.60	1.50	.72	1.50	.60	1.50	.72	1.50	3.00	7.50	3.00	6.25
13	.74	2.00	.72	2.00	.74	2.00	.72	2.00	4.80	12.97	4.80	13.33
14	.80	2.00	.72	2.00	.40	1.00	.36	1.00	4.20	10.50	4.20	11.66
15	.60	1.50	.63	1.50	.60	1.50	.63	1.50	4.38	10.95	4.38	10.43
16	.76	2.00	.80	2.00	.38	1.00	.40	1.00	2.70	7.11	2.70	6.75
17	.54	1.50	.45	1.50	.72	2.00	.60	2.00	1.50	4.18	1.50	5.00
18	.70	2.00	.64	2.00	.52	1.48	.48	1.50	1.20	3.42	1.20	3.75
19	1.00	2.00	.74	2.00	1.00	2.00	.74	2.00	3.48	6.96	3.48	9.40
20	.75	1.50	.68	1.52	.25	.50	.23	.52	1.08	2.16	1.08	2.40
21	.80	2.00	.76	2.00	.20	.50	.19	.50	3.00	7.50	3.00	7.89
22	.60	1.50	.65	1.51	.60	1.50	.65	1.51	3.00	7.50	3.00	6.98
23	.75	1.50	.87	1.50	.50	1.00	.58	1.00	4.50	9.00	4.50	7.76
24	.67	1.48	.60	1.50	.45	1.00	.40	1.00	2.40	5.34	2.40	6.00
25	.80	2.00	.76	2.00	.20	.50	.19	.50	3.90	9.75	3.90	10.27
26	.86	2.00	.90	2.00	.65	1.51	.68	1.51	3.42	7.95	3.42	7.60
27	.60	1.50	.60	1.50	.40	1.00	.40	1.00	2.70	6.75	2.70	6.75
28	.60	1.50	.60	1.50	.20	.50	.20	.50	3.60	9.00	3.60	9.00
29	.70	2.00	.70	2.00	.35	1.00	.35	1.00	3.18	9.09	3.18	9.09
30	.35	1.00	.38	1.00	.18	.52	.19	.50	3.60	10.27	3.60	9.47
31	.75	1.50	.63	1.50	.50	1.00	.42	1.00	4.50	9.00	4.50	10.72
32	.63	1.50	.60	1.50	.84	2.00	.80	2.00	1.80	4.29	1.80	4.50
33	1.00	2.00	.88	2.00	.50	1.00	.44	1.00	3.30	6.60	3.30	7.50
34	.70	2.00	.72	2.00	1.05	3.00	1.08	3.00	3.12	6.91	3.12	8.68
35	.80	2.00	.74	2.00	.60	1.50	.55	1.50	3.90	9.75	3.90	10.54
36	.52	1.47	.58	1.50	.52	1.47	.58	1.50	3.75	10.71	3.75	9.61
37	1.00	2.00	.84	2.00	.50	1.00	.42	1.00	3.96	7.92	3.96	9.44
38	.80	2.00	.94	2.00	.80	2.00	.94	2.00	3.60	9.00	3.60	7.66
39	.90	1.50	.68	1.52	.60	1.00	.45	1.00	5.70	9.50	5.70	12.66
40	.68	1.51	.63	1.50	.90	2.00	.84	2.00	3.24	7.20	3.24	7.71
Total 40 acres	28.57	66.95	27.23	67.05	23.10	54.98	22.27	55.02	125.97	297.30	125.97	309.30
Average one acre	.715	1.674	.681	1.676	.578	1.374	.557	1.376	3.149	7.432	3.149	7.732

OATS—TABLE VIII, continued.

Cost of production and value of products of 40 acres of oats.

OFFICE NO	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Costs per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	1.50	.60	1.11	.25	.62	.25	.46	.50	1.25	.50	.93
2	.60	1.50	.60	1.67	.25	.62	.25	.69	.50	1.25	.50	1.39
3	.25	.41	.25	[illegible]	.25	.41	.25	.52	.50	.83	.50	1.05
4	.34	.87	.34	[illegible]	.25	.64	.25	.67	.50	1.29	.50	1.35
5	.33	.70	.33	[illegible]	.25	.53	.25	.62	.50	1.07	.50	1.26
6	.33	.64	.33	.74	.25	.48	.25	.55	.50	.97	.50	1.11
7	.23	.58	.23	.53	.25	.62	.25	.58	.50	1.25	.50	1.17
8	.30	.60	.30	.73	.25	.50	.25	.63	.50	1.00	.50	1.23
9	.17	.49	.17	.49	.25	.71	.25	.71	.50	1.43	.50	1.43
10	.15	.30	.15	.37	.25	.50	.25	.62	.50	1.00	.50	1.25
11	.33	.83	.33	.83	.25	.62	.25	.62	.50	1.25	.50	1.25
12	.40	1.00	.40	.83	.25	.62	.25	.52	.50	1.25	.50	1.04
13	.20	.54	.20	.55	.25	.67	.25	.69	.50	1.35	.50	1.39
14	.50	1.25	.50	1.38	.30	.75	.30	.84	.50	1.25	.50	1.39
15	[illegible]	.45	.58	1.38	.30	.75	.30	.72	.50	1.25	.50	1.19
16	.47	1.23	.47	[illegible]	.25	.66	.25	.62	.50	1.33	.50	1.25
17	.25	.69	.25	.83	.25	.69	.25	.83	.50	1.39	.50	1.67
18	.27	.78	.27	.84	.25	.71	.25	.78	.50	1.43	.50	1.57
19	.60	1.20	.60	1.62	.25	.50	.25	.67	.50	1.00	.50	1.35
20	.22	.44	.22	.49	.25	.50	.25	.55	.50	1.00	.50	1.11
21	.33	.83	.33	.87	.25	.62	.25	.65	.50	1.25	.50	1.31
22	.23	.58	.23	.53	.25	.62	.25	.58	.50	1.25	.50	1.17
23	.50	1.00	.50	.86	.25	.50	.25	.43	.50	1.00	.50	.86
24	.38	.84	.38	.95	.25	.56	.25	.63	.50	1.11	.50	1.25
25	.40	1.00	.40	1.05	.25	.62	.25	.65	.50	1.25	.50	1.32
26	.27	.63	.27	.60	.25	.58	.25	.56	.50	1.17	.50	1.11
27	.16	.40	.16	.40	.25	.63	.25	.63	.50	1.25	.50	1.25
28	.17	.43	.17	.43	.25	.63	.25	.63	.50	1.25	.50	1.25
29	.35	1.00	.35	1.00	.25	.71	.25	.71	.50	1.43	.50	1.43
30	.13	.37	.13	.34	.25	.72	.25	.66	.50	1.43	.50	1.33
31	.07	.14	.07	.17	.25	.50	.25	.59	.50	1.00	.50	1.18
32	.24	.57	.24	.60	.25	.60	.25	.62	.50	1.19	.50	1.25
33	.43	.86	.43	.98	.25	.50	.25	.57	.50	1.00	.50	1.14
34	.49	1.40	.49	1.36	.25	.71	.25	.69	.50	1.43	.50	1.38
35	.22	.55	.22	.59	.25	.63	.25	.68	.50	1.25	.50	1.35
36	.50	1.42	.50	1.28	.25	.71	.25	.64	.50	1.42	.50	1.28
37	.75	1.50	.75	1.78	.25	.50	.25	.59	.50	1.00	.50	1.19
38	1.00	2.50	1.00	2.13	.25	.62	.25	.53	.50	1.25	.50	1.07
39	.80	1.33	.80	1.77	.25	.42	.25	.56	.50	.83	.50	1.11
40	.11	.24	.11	.26	.25	.56	.25	.59	.50	1.11	.50	1.19
Total 40 acres	14.66	34.59	14.65	35.78	10.10	24.03	10.10	25.08	20.00	47.71	20.00	49.80
Average one acre	.366	.865	.366	.894	.252	.601	.252	.621	.50	1.193	.50	1.245

OATS—TABLE VIII, continued.

Cost of production and value of products of 40 acres of oats.

OFFICE NO.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 $	Acre 5 years $	Bush 5 years $
1	12.13	30.33	12.93	23.94	5.76	14.40	5.76	10.66	6.40	.16	14.58	.27
2	12.22	30.55	12.51	34.75	4.68	11.70	4.68	13.00	5.60	.14	10.44	.29
3	11.72	19.53	11.77	24.62	5.00	8.33	5.00	10.41	9.60	.16	14.40	.30
4	9.63	24.69	9.75	26.35	4.80	12.31	4.80	18.97	7.02	.18	9.62	.26
5	11.14	23.70	11.09	27.72	4.50	9.57	4.50	11.26	8.46	.18	10.40	.26
6	10.24	19.69	10.16	22.57	5.70	10.96	5.70	12.66	9.36	.18	11.70	.26
7	11.49	28.72	11.86	27.68	5.20	13.00	5.20	12.09	7.20	.18	11.61	.27
8	11.84	23.68	11.90	29.02	4.75	9.50	4.75	11.58	9.00	.18	10.66	.26
9	9.56	27.31	9.72	27.77	4.50	12.85	4.50	12.85	7.00	.20	9.80	.28
10	10.82	21.64	10.86	27.15	4.60	9.20	4.60	11.50	8.50	.17	10.00	.25
11	10.94	27.35	11.11	27.77	5.00	12.50	5.00	12.50	7.20	.18	10.00	.25
12	11.60	29.00	12.26	25.54	6.00	15.00	6.00	12.50	10.40	.26	17.76	.37
13	13.35	36.08	13.64	37.88	4.68	12.65	4.68	13.00	5.55	.15	9.36	.26
14	12.61	31.52	12.85	35.69	4.14	10.35	4.14	11.50	6.00	.15	9.72	.27
15	12.26	30.65	12.68	30.18	5.22	13.05	5.22	12.44	6.00	.15	11.34	.27
16	11.86	31.21	12.19	30.47	4.00	10.52	4.00	10.00	6.84	.18	10.80	.27
17	8.92	24.77	8.93	29.76	3.50	9.72	3.50	16.66	5.76	.16	8.10	.27
18	8.38	23.94	8.44	26.37	3.50	10.00	3.50	10.93	6.30	.18	8.32	.26
19	12.65	25.30	12.48	33.73	4.60	9.20	4.60	12.43	8.50	.17	9.99	.27
20	8.93	17.86	9.10	20.22	5.40	10.80	5.40	12.00	8.00	.16	12.60	.28
21	11.03	27.57	11.03	29.02	4.32	10.80	4.32	11.36	6.40	.16	9.88	.26
22	11.16	27.90	11.62	27.03	5.10	12.75	5.10	11.86	6.40	.16	12.04	.28
23	13.34	26.68	13.84	23.86	6.00	12.00	6.00	10.34	8.50	.17	15.66	.27
24	10.03	22.28	10.27	25.68	4.76	10.57	4.76	11.90	7.20	.16	11.20	.28
25	11.07	27.67	11.32	29.79	5.30	13.25	5.30	13.94	6.40	.16	10.64	.28
26	11.50	26.74	11.51	25.57	5.40	12.55	5.40	12.00	7.74	.18	11.70	.26
27	10.38	25.95	10.65	26.62	5.22	13.05	5.22	13.05	7.20	.18	11.60	.29
28	11.30	28.25	11.53	28.83	5.04	12.60	5.04	12.60	7.20	.18	10.80	.27
29	10.47	29.91	10.69	30.54	4.14	11.82	4.14	11.82	5.60	.16	9.45	.27
30	9.99	28.54	10.28	27.05	3.99	11.31	3.96	10.42	6.30	.18	10.64	.28
31	11.61	23.22	11.38	27.09	4.68	9.36	4.68	11.14	8.50	.17	11.34	.27
32	10.51	25.02	10.38	25.95	4.68	11.14	4.68	11.70	7.56	.18	10.40	.26
33	11.95	23.90	11.99	27.25	5.40	10.80	5.40	12.27	8.50	.17	11.44	.26
34	11.32	32.34	11.38	31.60	4.15	11.85	4.15	11.53	4.95	.15	9.36	.26
35	11.72	29.30	11.91	32.19	4.58	11.45	4.58	12.38	7.20	.18	10.36	.28
36	10.62	30.34	10.99	28.18	4.20	12.00	4.20	10.77	6.30	.18	10.92	.28
37	12.59	25.18	12.65	30.12	5.40	10.80	5.40	12.85	8.00	.16	10.92	.26
38	12.72	31.80	13.25	28.18	5.04	12.60	5.04	10.72	7.20	.18	13.16	.28
39	14.18	23.63	14.11	31.35	5.40	9.00	5.40	12.00	9.00	.15	12.15	.27
40	10.43	23.17	10.77	25.64	5.06	11.24	5.06	12.04	6.75	.15	11.34	.27
Total 40 acres	450.21	1066.9	457.78	1130.5	193.39	456.55	193.36	485.62	291.59	6.83	446.20	10.90
Average one acre	11.255	26.673	11.444	28.263	4.835	11.414	4.834	12.140	7.289	.1707	11.155	.272

OATS—TABLE VIII, continued.

Cost of production and value of products of 40 acres of oats.

OFFICE No.	TOTAL VALUE OF PRODUCT RAISED.				PROFIT.				LOSS.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	12.16	30.40	20.34	37.66	.03	0.07	7.41	13.72	......	......	......	......
2	10.28	25.70	15.12	42.00	......	......	2.61	7.25	1.94	4.85	......	......
3	14.60	24.33	19.40	40.41	2.88	4.80	7.63	15.89	......	......	......	......
4	11.82	30.31	14.42	44.97	2.19	5.62	4.67	18.62	......	......	......	......
5	12.96	27.57	14.90	37.25	1.82	3.87	3.81	9.53	......	......	......	......
6	15.06	28.96	17.40	38.66	4.82	9.27	7.24	16.09	......	......	......	......
7	12.40	31.00	16.81	39.09	.91	2.28	4.95	11.51	......	......	......	......
8	13.75	27.50	15.41	37.58	1.91	3.82	3.51	8.56	......	......	......	......
9	11.50	32.85	14.30	40.85	1.94	5.54	4.58	13.08	......	......	......	......
10	13.10	26.20	14.60	36.50	2.28	4.56	3.74	9.35	......	......	......	......
11	12.20	30.50	15.00	37.50	1.26	3.15	3.89	9.73	......	......	......	......
12	16.40	41.00	23.76	49.50	4.80	12.00	11.50	23.96	......	......	......	......
13	10.23	27.65	14.04	39.00	......	......	.40	1.12	3.12	8.43	......	......
14	10.14	25.35	13.86	38.50	......	......	1.01	2.81	2.47	6.15	......	......
15	11.22	28.05	16.56	39.44	......	......	3.88	9.26	1.04	2.60	......	......
16	10.84	28.52	14.80	37.00	......	......	2.61	6.53	1.02	2.69	......	......
17	9.26	25.72	11.60	43.66	.34	.95	2.67	13.90	......	......	......	......
18	9.80	28.00	11.82	36.93	1.42	4.05	3.38	10.56	......	......	......	......
19	13.10	26.20	14.59	39.43	.45	.90	2.11	5.70	......	......	......	......
20	13.40	26.80	18.00	40.00	4.47	8.94	8.90	19.78	......	......	......	......
21	10.72	26.80	14.20	37.36	......	......	3.17	8.34	.31	.77	......	......
22	11.60	28.75	17.14	39.86	.34	.85	5.52	12.84	......	......	......	......
23	14.50	29.00	21.66	37.34	1.16	2.32	7.82	13.48	......	......	......	......
24	11.96	28.57	15.96	39.90	1.93	4.29	5.69	14.22	......	......	......	......
25	11.70	29.25	15.94	41.94	.63	1.58	4.62	12.15	......	......	......	......
26	13.14	30.66	17.10	38.00	1.64	3.81	5.59	12.43	......	......	......	......
27	12.42	31.05	16.82	42.05	2.04	5.10	6.17	15.43	......	......	......	......
28	12.24	30.60	15.84	39.60	.94	2.35	4.31	10.77	......	......	......	......
29	9.74	27.82	13.59	38.82	......	......	2.90	8.28	.73	2.09	......	......
30	10.29	29.31	14.60	38.42	.30	.77	4.32	11.37	......	......	......	......
31	13.18	26.36	16.02	38.14	1.57	3.14	4.64	11.05	......	......	......	......
32	12.24	29.14	15.08	37.70	1.73	4.12	4.70	11.75	......	......	......	......
33	13.90	27.80	16.84	38.27	1.95	3.90	4.85	11.02	......	......	......	......
34	9.10	26.85	13.51	37.53	......	......	2.13	5.93	2.22	5.49	......	......
35	11.78	29.45	14.94	40.38	.06	.15	3.03	8.19	......	......	......	......
36	10.50	30.00	15.12	38.77	......	......	4.13	10.59	.12	.34	......	......
37	13.40	26.80	16.32	38.85	.81	1.62	3.67	8.73	......	......	......	......
38	12.24	30.60	18.20	38.72	......	......	4.96	10.54	.48	1.20	......	......
39	14.40	24.00	17.55	39.00	.22	.37	5.69	7.65	......	......	......	......
40	11.81	26.24	16.40	39.04	1.38	3.07	5.63	13.40	......	......	......	......
Total 40 acres	484.98	1139.5	639.56	1575.6	48.22	107.27	181.78	445.11	13.45	34.63	......	......
Average one acre	12.124	28.488	15.990	39.39	1.205	2.682	4.545	11.128	.336	.866	......	......

TABLE IX.—SUMMARY OF TABLE 8.

In the tables on this page has been summarized the results in the foregoing table. The tables show the total cost of producing 40 acres of oats and the average cost per acre and bushel, the total value of products of 40 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	40 acres 1898.	One acre.	Bush.	40 acres 5 years.	One acre.	Bush.
	$	$	Cts.	$	$	Cts.
Plowing	45 13	1.128	2.68	45 13	1.128	2.80
Harrowing and seeding	26 45	.661	1.58	26 45	661	1.64
Cutting	10 68	.267	.64	10 68	.267	.66
Fertilizing	98 70	2.468	5.85	98 70	2.467	6.11
Seed	17 81	.445	1.06	27 55	.688	1.70
Shocking and stacking	29 05	.726	1.72	29 05	.726	1.80
Threshing	28 57	.715	1.68	27 23	.681	1.68
Marketing	23 10	.578	1.37	22 27	.558	1.37
Interest	125 97	3.149	7.43	125 97	3.149	7.74
Wear and tear	14 65	.366	.87	14 65	.366	.90
Taxes	10 10	.252	.60	10 10	.252	62
Other expenses	20 00	.500	1,19	20 00	.500	1.24
	$450 21	11.255	26.67	$457 78	11.444	28.26

Value of products.

Value of grain	$291 59	7.289	17.07	$446 20	11.155	27.25
Value of straw	193 39	4.835	11.41	193 36	4.835	12.14
Total value	$484 98	12.124	28.48	$639 56	15.990	39.39

Profit and loss.

Profit	$48 22	1.205	26.82	$181 78	4.545	11.13
Loss	13 45	.336	8 66	....	....	....
Balance profit	$34 77	.869	18.16	$181 78	4.545	11.13

TABLE X.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF OATS.

The data upon which the calculations in the tables on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Products" is shown in table 2. Table 3 shows the surplus value or cost, as the case may be. In table 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	One bush.
			$	$	Cts.
1	Plowing	185 hours at 23.5 cents	43.48	1.087	2.67
2	Harrowing, etc.	72 hours at 23.5 cents	16.92	.423	1.04
3	Seeding	40 hours at 23.5 cents	9.40	.235	.57
4	Cutting	41 hours at 23.5 cents	9.64	.241	.59
5	Shocking	55 hours at 12.2 cents	6.71	.168	.41
6	Stacking, man and team	61 hours at 28.5 cents	14.34	.358	.88
7	Stacking, extra help	61 hours at 12.2 cents	7.44	.186	.45
8	Threshing, labor	112 hours at 12.2 cents	13.66	.341	.83
9	Threshing machine	1634 bush. at .5 cents	8.17	.204	.50
10	Marketing	95 hours at 23.5 cents	22.43	.561	1.37
11	Seed	104 bush. at 35 cents	36.40	.910	2.23
12	Taxes	40 acres at 25.3 cents	10.12	.253	.62
13	Fertilizing clover and	86 loads manure	45.00	1.125	2.75
14	Other expenses	40 acres at 50 cents	20.00	.500	1.22
15	Depreciation machinery	146.80 dollars at 10 per cent.	14,68	.367	.90
	Annual investment		278.39	6.959	17.03
16	Interest, machinery	146.80 dollars at 6 per cent.	8.81	.220	.54
17	Interest, an. investment	278.39 dollars at 6 per cent.	16.70	.418	1.02
18	Interest, land	1,780.00 dollars at 6 per cent.	106.80	2.670	6.54
	Total		410.70	10.267	25.13

Total investment, $2,205.19. Average investment per acre, $55.13. Team work, 49.5 days; labor, 72.3 days. Value per acre land, $44.50.

2. *Value of products.*

1	1634 bushels of oats at 27.30 cents	446.08	11.152	27.30
2	40 acres of straw at $2.25	90.00	2.250	5.51
	Total	536.08	13.402	32.81

3. *Surplus value.*

1	Surplue value—profits	125.38	3.135	7.68

Equivalent to 5.68 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of products above the sum of these expenses. This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising oats.

Annual investment		278.39	6.959	17.03
Machinery	$146.80 at 12 per cent.	17.62	.440	1.08
Annual investment	$278.39 at 12 per cent.	33.40	.835	2.05
Total expenses less rent		329.41	8.234	20.16
Surplus credited to land		*206.67	5.168	12.65
Total		536.08	13.402	32.81

* Capitalized at 12 per cent. equivalent to $1,722.25 or $43.06 per acre. This is $1.45 per acre below the value reported by the farmers.

TABLE XI.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF OATS.

The data upon which the calculations in the table on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Product" is shown in table 2. Table 3 shows the "Surplus Value" above cost. In table 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	One bush.
			$	$	Cts.
1	Plowing	185 hours at 12.2 cents	22.57	.564	1.38
2	Harrowing, etc.	72 hours at 12.2 cents	8.78	.219	.54
3	Seeding	40 hours at 12.2 cents	4.88	.122	.30
4	Cutting	41 hours at 12.2 cents	5.00	.125	.31
5	Shocking	55 hours at 12.2 cents	6.71	.168	.41
6	Stacking	122 hours at 12.2 cents	14.88	.372	.91
7	Threshing, labor	112 hours at 12.2 cents	13.66	.342	.83
8	Threshing, machine	1634 bush. at .5 cent	8.17	.204	.50
9	Marketing	95 hours at 12.2 cents	11.59	.290	.71
10	Seed	104 bush. at 35 cents	36.40	.910	2.23
11	Taxes	40 acres at 25.3 cents	10.12	.253	.62
12	Maintenance of horses	40 acres at 80 cents	32.00	.800	1.96
13	Fertilizing, clover and	86 loads manure	45.00	1.125	2.75
14	Other expenses	40 acres at 50 cents	20.00	.500	1.22
15	Depreciation machinery	146.80 dollars at 10 per cent.	14.68	.367	.90
16	Depreciation horses	52.80 dollars at 10 per cent.	5.28	.132	.32
	Annual investment		259.72	6.493	15.89
17	Interest, machinery	146.80 dollars at 6 per cent.	8.81	.220	.54
18	Interest, horses	52.80 dollars at 6 per cent.	3.17	.079	.20
19	Interest, an. investment.	259.72 dollars at 6 per cent.	15.58	.390	.95
20	Interest, land	1,780.00 dollars at 6 per cent.	106.80	2.670	6.54
	Total		394.08	9.852	24.12

Total investment, $2,239.32. Average investment per acre, $55.98. Team work, 49.5 days. Labor, 72.3 days. Value per acre of land, $44.50.

2. *Value of products.*

1	1634 bushels of oats at 27.3 cents	446.08	11.152	27.30
2	40 acres of straw at $2.25	90.00	2.250	5.51
	Total	536.08	13.402	32.81

3. *Surplus value.*

Surplus value—profit	142.00	3.550	8.69

Equivalent to 6.34 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on the same and upon the value of machinery and horses used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising oats.)

Annual investment		259.72	6.493	15.89
Machinery	$146.80 at 12 per cent.	259.72	6.493	15.89
Horses	52.80 at 12 per cent.	6.34	.159	.40
Annual investment	259.72 at 12 per cent.	31.16	.779	1.90
Total expenses less rent		314.84	7.871	19.27
Surplus credited to land		*221.24	5.531	13.54
Total		536.08	13.402	32.81

*Capitalized at 12 per cent. equivalent to $1.843.66 or $46.09 per acre. This is $1.59 above the value placed upon it by the farmers.

In relation to the cost of producing 40 acres of rye as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XII, covering six pages, the cost per each acre in detail, the total cost of 40 acres and the average cost per acre are presented. Table XIII is made up of the totals of table XII. Table XIV is a more complete analysis of table XIII including besides the expenses of that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XV and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost of growing one acre of wheat as computed from table XV is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.564	2.74
Harrowing, etc	.219	1.07
Seeding	.122	.59
Cutting	.125	.61
Shocking	.168	.81
Stacking	.372	1.81
Threshing labor	.287	1.39
Threshing machine	.206	1.00
Marketing	.220	1.07
Seed	.800	3.88
Taxes	.253	1.23
Maintenance horses	.800	3.88
Fertilizing	.750	3.64
Other expenses	.500	2.43
Depreciation machinery	.367	1.78
Depreciation horses	.132	.64
Annual investment	$5.885	2.857
Interest, machinery	.220	1.07
Interest, horses	.079	.38
Interest, annual investment	.353	1.71
Interest, land	2.670	12.96
Total	$9.207	44.69

BARLEY—TABLE XVI.

Cost of production and value of products of 40 acres of barley.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1............	1.00	3.34	1.00	3.57	.65	2.16	.65	2.32	.25	.83	.25	.89
2............	1.40	4.66	1.40	4.38	.90	3.00	.90	2.81	.30	1.00	.30	.93
3............	1.00	3.34	1.00	2.64	.55	1.83	.55	1.44	.30	1.00	.30	.79
4............	.85	2.48	.85	2.74	.63	1.80	.63	2.03	.25	.71	.25	.81
5............	1.00	2.86	1.00	3.34	.50	1.42	.50	1.66	.25	.71	.25	.83
6............	.80	2.36	.80	2.85	.45	1.32	.45	1.60	.18	.53	.18	.64
7............	1.00	2.86	1.00	3.33	.77	2.20	.77	2.56	.20	.57	.20	.67
8............	1.00	2.70	1.00	3.33	.50	1.36	.60	1.67	.25	.68	.25	.88
9............	.75	2.14	.75	2.34	.63	1.80	.63	1.97	.25	.71	.25	.79
10............	1.60	4.58	1.60	5.71	.90	2.57	.90	3.21	.30	.85	.30	1.07
11............	1.35	3.75	1.35	4.23	.68	1.89	.68	2.13	.27	.75	.27	.85
12............	1.00	3.33	1.00	3.13	.65	2.17	.65	2.04	.16	.60	.15	.47
13............	1.60	5.55	1.50	5.00	.72	2.66	.72	2.40	.30	1.12	.30	1.00
14............	1.16	4.64	1.16	4.64	1.07	4.28	1.07	4.28	.46	1.80	.45	1.80
15............	1.00	3.57	1.00	3.57	.50	1.78	.50	1.78	.20	.71	.20	.71
16............	2.00	5.71	2.00	6.67	1.06	3.07	1.08	3.60	.45	1.29	.45	1.50
17............	1.00	3.33	1.00	3.71	.66	1.84	.55	2.03	.20	.67	.20	.74
18............	1.00	3.57	1.00	3.70	.40	1.44	.40	1.48	.20	.72	.20	.74
19............	1.26	3.57	1.25	3.91	.75	2.14	.75	2.34	.27	.78	.27	.83
20............	1.00	2.86	1.00	3.03	.70	2.00	.70	2.13	.30	.86	.30	.91
21............	1.20	3.63	1.20	4.00	.65	1.64	.55	1.84	.30	.91	.30	1.00
22............	1.24	4.13	1.24	3.87	.64	2.14	.64	2.00	.27	.90	.27	.85
23............	1.37	4.56	1.37	4.56	.82	2.73	.82	2.74	.37	1.23	.37	1.23
24............	1.20	3.43	1.20	3.64	.98	2.80	.98	2.98	.25	.71	.25	.76
25............	1.00	2.86	1.00	3.03	.57	1.63	.57	1.85	.20	.57	.20	.60
26............	1.00	3.57	1.00	3.33	.50	1.78	.50	1.66	.20	.72	.20	.67
27............	1.13	3.77	1.13	3.53	.50	1.66	.50	1.56	.23	.77	.23	.72
28............	1.00	2.50	1.00	3.12	.70	1.75	.70	2.19	.25	.62	.25	.78
29............	1.00	3.70	1.00	4.55	.65	2.41	.65	2.95	.42	1.56	.42	1.91
30............	1.00	3.12	1.00	2.86	.63	1.96	.63	1.79	.30	.95	.30	.86
31............	1.25	4.84	1.25	4.17	.63	2.42	.63	2.10	.30	1.15	.30	1.00
32............	1.00	3.67	1.00	3.33	.60	2.14	.60	2.32	.25	.89	.25	.83
33............	1.50	3.75	1.50	4.28	.60	1.50	.60	1.72	.30	.75	.30	.86
34............	1.25	3.90	1.25	3.79	.59	1.83	.59	1.78	.25	.78	.25	.75
35............	1.00	3.33	1.00	3.33	.60	2.00	.60	2.00	.20	.67	.20	.67
36............	.84	2.40	.84	2.80	.66	1.89	.66	2.20	.30	.85	.30	1.00
37............	1.13	4.04	1.13	3.77	.53	1.89	.53	1.77	.25	.89	.25	.83
38............	1.25	6.25	1.25	6.25	1.07	5.35	1.07	5.35	.25	1.25	.25	1.25
39............	1.25	4.03	1.25	4.62	.55	1.78	.55	2.04	.25	.80	.25	.92
40............	.86	2.86	.86	3.07	.52	1.66	.52	1.87	.23	.76	.23	.82
Total 40 acres....	45.13	145.39	45.13	151.72	26.47	85.72	26.47	90.19	10.69	34.52	10.69	36.11
Average one acre.	1.128	3.635	1.128	3.793	.662	2.143	.662	2.255	.267	.863	.267	.903

BARLEY—TABLE XVI, continued.

Cost of production and value of products of 40 acres of barley.

OFFICE NO.	FERTILIZING.				SEED.				SHOCKING AND STACKING.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	3.10	10.33	3.10	11.07	.56	1.87	.90	3.21	.68	2.27	.68	2.43
2	2.40	8.00	2.40	7.50	.60	2.00	.88	2.75	1.20	4.00	1.20	3.75
3	2.75	9.16	2.75	7.25	.54	1.80	.92	2.43	.83	2.77	.83	2.18
4	3.00	6.57	3.00	9.67	.60	1.72	.62	2.00	.50	1.43	.50	1.62
5	3.00	8.5	3.00	10.00	.64	1.83	.90	3.00	.84	2.40	.84	2.80
6	3.00	8.82	3.00	10.71	.56	1.65	.92	3.29	.70	2.06	.70	2.50
7	3.00	8.67	3.00	10.00	.60	1.71	.92	3.07	.60	1.71	.60	2.00
8	3.00	8.11	3.00	10.00	.80	2.16	1.13	3.77	.90	2.43	.90	3.00
9	3.60	10.00	3.60	10.94	.38	1.08	.59	1.84	.64	1.55	.64	1.68
10	3.00	8.58	3.00	10.71	.84	2.40	1.32	4.72	.81	2.32	.81	2.89
11	3.00	8.34	3.00	9.39	.60	1.67	.88	2.75	.81	2.75	.81	2.54
12	3.00	10.00	3.00	9.36	.60	2.00	.60	2.50	.95	3.17	.95	2.97
13	2.40	8.88	2.[illegible]	8.00	.42	1.55	.70	2.34	.95	3.52	.95	3.16
14	2.25	9.00	2.25	9.00	.65	2.60	1.12	4.48	.55	2.20	.55	2.20
15	2.50	6.93	2.50	8.93	.68	2.43	1.12	4.01	.75	2.68	.75	2.68
16	2.50	7.14	2.50	8.33	.52	1.49	.86	2.87	.73	2.09	.73	2.43
17	2.60	8.33	2.60	9.26	.60	2.00	.90	3.34	.59	1.96	.59	2.18
18	2.50	6.93	2.50	9.26	42	1.50	.65	2.42	.48	1.72	.48	1.78
19	2.50	7.15	2.50	7.81	.54	1.54	.70	2.19	.45	1.28	.45	1.41
20	3.25	9.29	3.25	9.85	56	1.60	.90	2.73	.84	2.40	.84	2.54
21	2.30	6.99	2.30	7.67	.66	2.00	1.12	3.73	.65	1.97	.65	2.16
22	2.30	7.67	2.30	7.18	65	2.16	.99	3.09	.55	1.83	.55	1.72
23	2.00	6.67	2.00	6.67	.56	1.87	.86	2.86	.47	1.57	.47	1.57
24	2.30	6.67	2.30	6.97	.60	1.72	.96	2.90	.87	2.48	.87	2.64
25	2.20	6.29	2.20	6.67	.68	1.94	1.06	3.22	.85	2.43	.85	2.57
26	2.75	9.82	2.75	9.17	.60	2.14	.96	3.20	.90	3.22	.90	3.00
27	2.50	8.33	2.50	7.82	.63	2.10	1.02	3.19	.86	2.87	.86	2.68
28	2.20	5.50	2.20	6.87	.56	1.40	.92	2.87	.78	1.95	.78	2.44
29	2.00	7.40	2.00	9.09	.42	1.56	.64	2.90	1.00	3.70	1.00	4.55
30	2.40	7.50	2.40	6.86	.70	2.19	1.10	3.15	.60	1.88	.60	1.71
31	2.40	9.22	2.40	8.00	.63	2.42	1.15	3.83	.78	3.00	.78	2.60
32	3.25	11.61	3.25	10.83	.65	2.32	.99	3.00	.35	1.25	.35	1.16
33	3.50	8.75	3.50	10.00	.49	1.22	1.10	3.15	.64	1.60	.64	1.83
34	2.25	7.04	2.25	6.82	.68	2.13	1.10	3.3[illegible]	70	2.19	.70	2.12
35	2.50	8.33	2.50	8.33	.63	2.10	1.06	3.53	.86	2.87	.86	2.87
36	2.25	6.43	2.25	7.50	.56	1.60	.90	3.00	.58	1.66	.68	1.93
37	2.40	8.57	2.40	8.00	.70	2.50	1.12	3.73	.75	2.68	.75	2.50
38	2.20	11.00	2.20	11.00	.56	2.80	.90	4.50	.75	3.75	.75	3.75
39	2.25	7.26	2.25	8.33	.70	2.26	1.15	4.26	1.00	3.23	1.00	3.71
40	3.00	10.00	3.00	10.72	.60	2.00	.56	2.00	.41	1.36	.41	1.46
Total 40 acres....	05.10	335.65	105.10	351.54	23.97	77.03	37.39	125.15	29.05	93.70	29.05	97.71
Average one acre.	2.627	8.391	2.627	8.788	.599	1.926	.935	3.129	.726	2.342	.726	2.443

BARLEY—TABLE XVI, continued.

Cost of production and value of products of 40 acres of barley.

OFFICE No.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	2.00	.56	2.00	.16	.50	.14	.50	3.60	12.00	3.60	12.85
2	.75	2.50	.80	2.50	.30	1.00	.32	1.00	3.72	12.40	3.72	11.63
3	.60	2.00	.76	2.00	.30	1.00	.38	1.00	3.84	12.80	3.84	10.10
4	1.05	3.00	.93	3.00	.70	2.00	.62	2.00	1.80	5.14	1.80	5.80
5	.70	2.00	.60	2.00	.35	1.00	.30	1.00	2.70	7.72	2.70	9.00
6	.68	2.00	.56	2.00	1.02	3.00	.84	3.00	1.50	4.41	1.50	5.36
7	.52	1.49	.45	1.50	.70	2.00	.60	2.00	3.00	6.57	3.00	10.00
8	1.11	3.00	.90	3.00	.74	2.00	.60	2.00	3.60	9.73	3.60	12.00
9	.70	2.00	.64	2.00	1.05	3.00	.96	3.00	1.60	4.29	1.60	4.68
10	.70	2.00	.56	2.00	.35	1.00	.28	1.00	1.80	5.14	1.60	6.43
11	.72	2.00	.64	2.00	1.08	3.00	.96	3.00	2.40	6.66	2.40	7.50
12	.45	1.50	.48	1.50	.60	2.00	.64	2.00	3.00	10.00	3.00	9.36
13	.68	2.62	.75	2.50	.54	2.00	.60	2.00	4.80	17.77	4.80	16.00
14	.50	2.00	.50	2.00	.50	2.00	.50	2.00	4.20	16.80	4.20	16.80
15	.42	1.50	.42	1.50	.42	1.50	.42	1.50	4.38	15.64	4.38	15.64
16	1.05	3.00	.90	3.00	.70	2.00	.60	2.00	2.70	7.72	2.70	9.00
17	.75	2.50	.68	2.52	.60	2.00	.54	2.00	1.50	5.00	1.50	5.56
18	.84	3.00	.81	3.00	.56	2.00	.54	2.00	1.20	4.29	1.20	4.44
19	1.05	3.00	.96	3.00	.70	2.00	.64	2.00	3.48	9.94	3.48	10.88
20	.53	1.51	.49	1.48	.35	1.00	.33	1.00	1.08	3.09	1.08	3.27
21	.82	2.48	.75	2.50	.33	1.00	.30	1.00	3.00	9.09	3.00	10.00
22	.75	2.50	.80	2.50	.60	2.00	.64	2.00	3.00	10.00	3.00	9.37
23	.60	2.00	.60	2.00	.60	2.00	.60	2.00	4.50	15.00	4.50	15.00
24	.88	2.52	.82	2.49	.35	1.00	.33	1.00	2.40	6.86	2.40	7.27
25	.88	2.51	.82	2.48	.35	1.00	.33	1.00	3.90	11.14	3.90	11.69
26	.56	2.00	.60	2.00	.56	2.00	.60	2.00	3.42	12.21	3.42	11.40
27	.45	1.50	.48	1.50	.60	2.00	.64	2.00	2.70	9.00	2.70	8.43
28	.60	1.50	.48	1.50	.20	.50	.16	.50	3.60	9.00	3.60	11.25
29	.54	2.00	.44	2.00	.54	2.00	.44	2.00	3.18	11.77	3.18	14.46
30	.32	1.00	.35	1.00	.32	1.00	.35	1.00	3.60	11.25	3.60	10.29
31	.39	1.50	.45	1.50	.26	1.00	.30	1.00	4.50	17.30	4.50	16.00
32	.70	2.50	.75	2.50	[illegible]	2.00	.60	2.00	1.80	6.43	1.80	6.00
33	.80	2.00	.70	2.00	.60	1.50	.52	1.48	3.30	8.25	3.30	9.43
34	.64	2.00	.66	2.00	.64	2.00	.66	2.00	3.12	9.75	3.12	9.45
35	.60	2.00	.60	2.00	.45	1.50	.45	1.50	3.90	13.00	3.90	13.00
36	.70	2.00	.60	2.00	.70	2.00	.60	2.00	3.75	10.71	3.75	12.50
37	.56	2.00	.60	2.00	.70	2.50	.75	2.50	[illegible]	14.16	3.96	13.20
38	.40	2.00	.40	2.00	.40	2.00	.40	2.00	3.60	18.00	3.60	18.00
39	.47	1.52	.41	1.52	.46	1.48	.41	1.52	6.70	18.39	6.70	21.11
40	.60	2.00	.56	2.00	.90	3.00	.84	3.00	3.24	10.80	3.24	11.57
Total 40 acres....	26.66	84.05	25.26	83.99	21.83	69.48	20.73	69.50	125.97	411.22	125.97	424.70
Average one acre.	.666	2.101	.631	2.099	.546	1.737	.518	1.737	3.15	10.280	3.15	10.62

BARLEY—TABLE XVI, continued.

Cost of production and value of products of 40 acres of barley.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	2.00	.60	2.15	.25	.83	.25	.89	.50	1.67	.50	1.79
2	.60	2.00	.60	1.88	.25	.83	.25	.78	.50	1.67	.50	1.57
3	.25	.83	.25	.65	.25	.83	.25	.65	.50	1.67	.50	1.31
4	.34	.97	.34	1.09	.25	.71	.25	.81	.50	1.43	.50	1.62
5	.33	.96	.33	1.10	.25	.71	.25	.83	.50	1.43	.50	1.67
6	.33	.97	.33	1.18	.25	.73	.25	.89	.50	1.47	.50	1.79
7	.23	.66	.23	.77	.25	.71	.25	.83	.50	1.43	.50	1.67
8	.30	.81	.30	1.00	.25	.67	.25	.83	.50	1.35	.50	1.67
9	.17	.49	.17	.53	.25	.71	.25	.78	.50	1.43	.50	1.57
10	.15	.42	.15	.64	.25	.71	.25	.89	.50	1.43	.50	1.79
11	.33	.91	.33	1.04	.25	.69	.25	.78	.50	1.39	.50	1.57
12	.40	1.33	.40	1.26	.25	.83	.25	.78	.50	1.67	.50	1.57
13	.20	.74	.20	.66	.25	.93	.25	.83	.50	1.87	.50	1.67
14	.50	2.00	.50	2.00	.30	1.20	.30	1.20	.50	2.00	.50	2.00
15	.58	2.07	.58	2.07	.30	1.07	30.	1.07	.50	1.79	.50	1.79
16	.47	1.35	.47	1.57	.25	.71	.25	.83	.50	1.43	.50	1.67
17	.25	.83	.25	.92	.25	.83	.25	.92	.50	1.67	.50	1.85
18	.27	.93	.27	1.00	.25	.89	.25	.92	.50	1.79	.50	1.85
19	.60	1.72	.60	1.88	.25	.71	.25	.78	.50	1.42	.50	1.66
20	.22	.62	.22	.67	25.	.71	.25	.75	.50	1.43	.50	1.51
21	.33	1.00	.33	1.10	.25	.75	.25	.83	.50	1.51	.50	1.67
22	.23	.77	.23	.72	.25	.83	.25	.78	.50	1.67	.50	1.57
23	.50	1.67	.50	1.67	.25	.83	.25	.83	.50	1.67	.50	1.67
24	.38	1.08	.38	1.16	.25	.71	.25	.75	.50	1.43	.50	1.51
25	.40	1.14	.40	1.22	.25	.71	.25	.75	.50	1.43	.50	1.52
26	.27	.96	.27	.90	.25	.89	.25	.83	.50	1.79	.50	1.67
27	.16	.53	.16	.50	.25	.83	.25	.78	.50	1.67	.50	1.57
28	.17	.43	.17	.53	.25	.62	.25	.78	.50	1.25	.50	1.57
29	.35	1.29	.35	1.59	.25	.94	.25	1.13	.50	1.86	.50	2.27
30	.13	.40	.13	.37	.25	.78	.25	.71	.50	1.56	.50	1.42
31	.07	.26	.07	.23	.25	.96	.25	.83	.50	1.93	.50	1.67
32	.24	.86	.24	.80	.25	.89	.25	.83	.50	1.79	.50	1.66
33	.43	1.07	.43	1.23	.25	.63	.25	.71	.50	1.25	.50	1.43
34	.49	1.53	.49	1.48	.25	.78	.25	.76	.50	1.57	.50	1.53
35	.22	.73	.22	.73	.25	.83	.25	.83	.50	1.67	.50	1.67
36	.50	1.43	.50	1.67	.25	.71	.25	.83	.50	1.43	.50	1.67
37	.75	2.68	.75	2.50	.25	.89	.25	.83	.50	1.77	.50	1.67
38	1.00	5.00	1.00	5.00	.25	1.25	.25	1.25	.50	2.50	.50	2.50
39	.80	2.58	.80	2.96	.25	.80	.25	.93	.50	1.61	.50	1.85
40	.10	.33	.10	.35	.25	.83	.25	.89	.50	1.66	.50	1.78
Total 40 acres....	14.68	48.34	14.64	50.65	10.10	32.47	10.10	33.90	20.00	64.46	20.00	67.36
Average one acre.	.366	1.208	.366	1.266	.252	.812	.252	.847	.50	1.611	.50	1.684

BARLEY—TABLE XVI, continued.

Cost of production and value of products of 40 acres of barley.

OFFICE NO.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1............	11.94	39.80	12.23	43.67	3.84	12.80	3.84	13.71	8.40	.28	12.60	.45
2............	12.92	43.06	13.27	41.47	4.20	14.00	4.20	13.12	9.00	.30	14.08	.44
3............	11.71	39.03	12.33	32.44	4.25	14.16	4.25	11.18	8.10	.27	17.48	.46
4............	10.47	29.91	10.29	33.19	6.00	17.14	6.00	19.35	10.50	.30	13.95	.45
5............	11.06	31.60	11.17	37.23	4.93	14.08	4.93	16.43	11.20	.32	13.60	.45
6............	9.97	29.32	10.03	35.81	3.96	11.64	3.96	14.14	9.52	.28	12.88	.46
7............	11.37	32.48	11.52	38.40	5.22	14.19	5.22	17.40	10.50	.30	13.80	.46
8............	12.95	35.00	12.93	43.10	5.10	13.78	5.10	17.00	11.84	.32	13.50	.45
9............	10.22	29.20	10.28	32.12	4.10	11.71	4.10	12.81	10.85	.31	13.94	.47
10............	11.20	32.00	11.47	40.96	3.60	10.28	3.60	12.85	9.80	.28	12.32	.44
11............	11.99	33.30	12.07	37.78	5.40	15.00	5.40	16.87	10.80	.30	14.08	.44
12............	11.55	38.50	11.82	36.93	4.25	14.16	4.25	13.28	9.00	.30	12.80	.40
13............	13.26	49.11	13.67	45.56	4.76	17.63	4.76	15.53	7.56	.28	14.10	.47
14............	12.63	50.52	13.10	52.40	3.30	13.20	3.30	13.20	6.50	.26	11.25	.45
15............	12.23	43.67	12.67	45.25	4.08	14.57	4.08	14.57	7.56	.27	12.60	.45
16............	12.95	37.00	13.04	43.47	4.00	11.42	4.00	13.37	9.10	.26	12.90	.43
17............	9.29	30.96	9.46	35.03	3.00	10.00	3.00	11.11	9.00	.30	12.15	.45
18............	8.62	30.78	8.80	32.59	3.20	11.42	3.20	11.85	7.84	.28	11.61	.43
19............	12.34	35.25	12.35	38.59	4.00	11.42	4.00	12.50	9.45	.27	11.20	.35
20............	9.58	27.37	9.86	29.87	4.48	12.80	4.48	13.57	9.80	.28	14.85	.46
21............	10.89	33.00	11.25	37.50	3.60	10.90	3.60	12.00	9.67	.29	13.50	.45
22............	10.98	36.60	11.41	35.65	3.50	11.66	3.50	10.96	8.70	.29	14.08	.44
23............	12.64	41.80	12.84	42.80	4.32	14.40	4.32	14.40	8.40	.28	12.90	.43
24............	10.96	31.31	11.24	34.06	3.50	10.00	3.50	10.60	10.50	.30	15.94	.48
25............	11.78	33.65	12.08	36.60	3.75	10.71	3.75	11.36	10.50	.30	15.51	.47
26............	11.61	41.10	11.95	39.83	4.14	14.78	4.14	13.80	8.40	.30	14.40	.48
27............	10.61	35.03	10.97	34.28	4.48	14.93	4.48	14.00	8.40	.28	14.40	.45
28............	10.81	27.02	11.01	34.40	4.16	10.40	4.16	13.00	11.20	.28	14.72	.46
29............	10.85	40.19	10.87	49.40	2.70	10.00	2.70	12.27	7.56	.28	9.46	.43
30............	10.75	33.59	11.21	32.02	5.10	15.93	5.10	14.57	8.96	.28	15.40	.44
31............	11.96	46.00	12.58	41.93	4.59	17.65	4.59	15.30	7.28	.28	13.80	.46
32............	10.15	36.25	10.68	35.26	3.60	12.86	3.60	12.00	8.12	.29	13.20	.44
33............	12.91	32.27	13.34	38.11	3.90	9.75	3.90	11.11	11.20	.28	15.40	.44
34............	11.36	35.50	11.82	35.81	4.05	12.65	4.05	12.27	9.60	.30	16.17	.49
35............	11.71	39.03	12.14	40.46	3.68	12.26	3.68	12.26	8.40	.28	14.10	.47
36............	11.59	33.11	11.78	39.10	4.35	12.43	4.35	29.00	9.80	.28	13.60	.46
37............	12.48	44.57	12.99	43.30	4.32	15.42	4.32	14.33	7.84	.28	13.50	.45
38............	12.23	61.15	12.57	62.85	4.16	20.80	4.16	20.80	6.60	.28	9.00	.45
39............	14.18	45.74	14.52	53.77	4.08	13.19	4.08	15.11	8.68	.28	12.42	.46
40............	11.21	37.26	11.07	39.53	4.00	13.33	4.00	14.28	9.00	.30	14.00	.50
Total 40 acres....	459.61	1482.0	470.53	1582.5	165.66	529.45	165.66	567.22	364.03	11.49	540.99	17.99
Average one acre.	11.490	37.051	11.763	39.563	4.141	13.236	4.141	14.18	9.101	.287	13.525	.449

BARLEY—TABLE XVI, continued.

Cost of production and value of products of 40 acres of barley.

Office No.	Total Value of Products Raised.				Profit.				Loss.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years Cts.	Bush 5 years Cts.
1...........	13.24	40.80	16.44	58.71	.30	1.00	4.21	15.04	......	......	......	......
2...........	13.20	44.00	18.28	57.12	.28	.94	6.01	15.65	......	......	......	......
3...........	12.35	41.16	21.73	57.18	.64	2.13	9.40	24.74	......	......	......	......
4...........	16.50	47.14	19.95	64.35	6.03	17.23	9.66	31.16	......	......	......	......
5...........	16.13	46.08	18.43	61.43	5.07	14.48	7.26	24.20	......	......	......	......
6...........	13.48	39.64	16.84	60.14	3.51	10.32	6.81	24.38	......	......	......	......
7...........	15.72	44.19	19.02	63.40	4.35	11.71	7.60	25.00	......	......	......	......
8...........	16.94	45.78	18.60	62.00	3.99	10.78	6.67	18.90	......	......	......	......
9...........	14.95	42.71	18.04	59.81	4.73	13.51	7.76	27.69	......	......	......	......
10...........	13.40	38.28	15.92	56.85	2.20	6.28	4.45	15.89	......	......	......	......
11...........	16.20	45.00	19.48	60.87	4.21	11.70	7.41	23.09	......	......	......	......
12...........	13.25	44.16	17.05	53.28	1.70	5.66	5.23	16.35	......	......	......	......
13...........	12.32	45.63	18.86	62.53	......	......	5.19	16.97	.94	3.48	......	......
14...........	9.80	39.20	14.65	58.20	......	......	1.45	5.80	2.83	11.32	......	......
15...........	11.64	41.57	16.68	59.57	......	......	4.01	14.32	.59	2.10	......	......
16...........	13.10	37.42	16.90	56.33	.15	.42	3.86	12.86	......	......	......	......
17...........	12.00	40.00	16.16	56.11	2.71	9.04	5.69	21.08	......	......	......	......
18...........	11.04	39.42	14.81	54.85	2.42	8.64	6.01	22.26	......	......	......	......
19...........	13.45	38.42	15.20	47.50	1.11	3.17	2.85	8.91	......	......	......	......
20...........	14.28	40.80	19.33	58.57	4.70	13.43	9.47	28.70	......	......	......	......
21...........	13.17	39.90	17.10	57.00	2.28	6.90	5.85	19.50	......	......	......	......
22...........	12.20	40.66	17.58	54.96	1.22	4.06	6.17	19.31	......	......	......	......
23...........	12.72	42.40	17.22	57.40	.18	.60	4.38	14.60	......	......	......	......
24...........	14.00	40.00	19.44	58.60	3.04	8.69	8.20	24.54	......	......	......	......
25...........	14.25	40.71	19.26	58.36	2.47	7.06	7.18	21.76	......	......	......	......
26...........	12.54	44.78	18.54	61.80	1.03	3.68	6.59	21.97	......	......	......	......
27...........	12.88	42.93	18.88	59.00	2.37	7.90	7.91	24.72	......	......	......	......
28...........	15.36	38.40	18.88	59.00	4.55	11.38	7.87	24.60	......	......	......	......
29...........	10.26	38.00	12.16	55.27	......	......	1.29	5.87	.59	2.19	......	......
30...........	14.06	43.93	20.50	58.57	3.31	10.34	9.29	26.55	......	......	......	......
31...........	11.87	45.65	18.39	61.30	......	......	6.81	19.37	.09	.35	......	......
32...........	11.72	41.86	16.80	56.00	1.57	5.61	6.22	20.74	......	......	......	......
....	[illegible]	37.75	19.30	55.11	2.19	5.48	6.96	17.00	......	......	......	......
34...........	13.65	42.65	20.22	61.27	2.29	7.15	8.40	25.46	......	......	......	......
35...........	12.08	40.26	17.78	59.26	.37	1.23	5.64	18.80	......	......	......	......
36...........	14.15	40.49	17.85	74.00	2.56	7.32	6.12	34.90	......	......	......	......
37...........	13.16	43.42	17.60	59.33	......	......	4.83	16.03	.32	1.16	......	......
38...........	9.78	48.90	13.16	65.80	......	......	.59	2.95	2.47	12.35	......	......
39...........	12.76	41.19	16.60	61.11	......	......	1.98	7.34	1.42	4.55	......	......
40...........	13.00	43.33	18.00	64.28	1.79	6.07	6.93	24.75	......	......	......	......
Total 40 acres....	529.68	1678.4	706.64	2365.2	79.32	239.91	236.11	783.70	9.25	37.49		
Average one acre.	13.242	41.961	17.666	59.15	1.983	5.848	5.903	19.592	.231	.937		

TABLE XVII.—SUMMARY OF TABLE XVI.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 40 acres of barley and the average cost per acre and bushel, the total value of products of 40 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

1. *Cost of production.*

Items.	40 acres. 1896.	One acre.	Bush.	40 acres. 5 years.	One acre.	Bush.
	$	$	Cts.	$	$	Cts.
Plowing	$45.13	$1.128	3.64	$45.13	$1.128	3.79
Harrowing and seeding	26.47	.662	2.14	26.47	.662	2.25
Cutting	10.69	.267	.86	10.69	.267	.90
Fertilizing	105.10	2.627	8.39	105.10	2.627	8.79
Seed	23.97	.599	1.93	37.39	.936	3.13
Shocking and stacking	29.05	.726	2.34	29.05	.726	2.44
Threshing	26.66	.667	2.10	25.26	.632	2.10
Marketing	21.83	.547	1.74	20.73	.518	1.74
Interest	125.97	3.149	10.28	125.97	3.149	10.62
Wear and tear	14 64	.366	1.21	14.64	.366	1.27
Taxes	10.10	.252	.81	10.10	.252	.85
Other expenses	20.00	.500	1.61	20.00	.500	1.68
Total	459.61	11.490	37.05	470.53	11.763	39.56

Value of products.

Value of grain	364.03	9.101	28.72	540.99	13.525	44.97
Value of straw	165.65	4.141	13.24	165.65	4.141	14.18
Total value	529.68	13.242	41.96	706.64	17.666	59.15

Profit and Loss.

Profit	79.32	1.983	58.48	236.11	5.903	19.59
Loss	9.25	.231	9.37	....	....	....
Balance profit	70.07	1.752	49.11	236.11	5.903	19.59

TABLE XVIII.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF BARLEY.

The data upon which the calculations in the tables on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Products" is shown in table 2. Table 3 shows the surplus value or cost, as the case may be. In table 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	One Bush.
			$	$	Cts.
1	Plowing	185 hours at 23.5 cents	43.48	1.087	3.61
2	Harrowing, etc.	72 hours at 23.5 cents	16.92	.423	1.40
3	Seeding	40 hours at 23.5 cents	9.40	.235	.78
4	Cutting	41 hours at 23.5 cents	9.64	.241	.80
5	Shocking	55 hours at 12.2 cents	6.71	.168	.55
6	Stacking, man and team	61 hours at 23.5 cents	14.34	.358	1.19
7	Stacking, extra help	61 hours at 12.2 cents	7.44	.186	.62
8	Threshing, labor	131 hours at 12.2 cents	15.98	.400	1.33
9	Threshing, machine	1205 bush. at 1 cent	12.05	.301	1.00
10	Marketing	80 hours at 23.5 cents	20.80	.520	1.73
11	Seed	88 bush. at 45 cents	39.60	.990	3.30
12	Taxes	40 acres at 25.3 cents	10.12	.253	.84
13	Fertilizing, clover and	86 loads of manure..	45.00	1.125	3.73
14	Other expenses	40 acres at 50 cents..	20.00	.500	1.66
15	Depreciation, machinery	146.80 dollars at 10 per cent.	14.68	.367	1.22
	Annual investment		286.16	7.154	23.76
16	Interest, machinery	146.80 dollars at 6 per cent.	8.81	.220	.73
17	Interest, annual invest...	286.16 dollars at 6 per cent.	17.17	.429	1.42
18	Interest, land	1,780.00 dollars at 6 per cent.	106.80	2.670	8.86
	Totals		418.94	10.473	34.77

Total investment, $2,212.96. Average investment per acre, $55.32. Team work, 47.9 days. Labor, 72.6 days. Value per acre of land, $44.50.

2. *Value of products.*

1	1205 bushels barley at 45 cents, av. 5 years	542.25	13.556	45.00
2	40 acres straw, $1.50	60.00	1.500	4.99
	Total	602.25	15.056	49.99

3. *Surplus Value.*

Surplus value—profits	183.31	4.583	15.22

Equivalent to 9.24 per cent. on the capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising barley.)

Annual investment		286.16	7.154	23.76
Machinery	$146.80 at 12 per cent.	17.62	.440	1.46
Annual investment	286.16 at 12 per cent.	34.34	.859	2.85
Total expenses less rent		338.12	8.453	28.07
Surplus credited to land		*264.13	6.603	21.92
Total		602.25	15.056	49.99

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*Capitalized at 12 per cent. equivalent to $2,201.09 or $55.02 per acre. This is $10.52 per acre above the value reported by the farmers.

TABLE XIX.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF BARLEY.

The data upon which the calculations in the table on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Product" is shown in table 2. Table 3 shows the "Surplus Value" above cost. In table 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value above the sum of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	One Bush.
			$	$	Cts.
1	Plowing	185 hours at 12.2 cents	22.57	.564	1.87
2	Harrowing, etc.	72 hours at 12.2 cents	8.78	.219	.73
3	Seeding	40 hours at 12.2 cents	4.88	.122	.40
4	Cutting	41 hours at 12.2 cents	5.00	.125	.42
5	Shocking	55 hours at 12.2 cents	6.71	.168	.55
6	Stacking	122 hours at 12.2 cents	14.88	.372	1.23
7	Threshing, labor	131 hours at 12.2 cents	15.98	.400	1.33
8	Threshing, machine	1205 bush. at 1 cent	12.05	.301	1.00
9	Marketing	80 hours at 12.2 cents	9.76	.244	.81
10	Seed	88 bush. at 45 cents	39.60	.990	3.30
11	Taxes	40 acres at 25.3 cents	10.12	.253	.84
12	Maintenance, horses	40 acres at 80 cents	32.00	.800	2.65
13	Fertilizing, clover	86 loads	45.00	1.125	3.73
14	Other expenses	40 acres at 50 cents	20.00	.500	1.66
15	Depreciation, machinery	146.80 dollars at 10 per cent.	14.68	.367	1.22
16	Depreciation, horses,	52.80 dollars at 10 per cent.	5.28	.132	.44
	Annual investment		267.29	6.682	22.18
17	Interest, machinery	146.80 dollars at 6 per cent.	8.81	.220	.73
18	Interest, horses	52.80 dollars at 6 per cent.	3.17	.079	.27
19	Interest, an. investment.	267.29 dollars at 6 per cent.	16.04	.401	1.33
20	Interest, land	1,780.00 dollars at 6 per cent.	106.80	2.670	8.86
	Total		402.11	10.052	33.37

Total investment, $2,246.89. Average investment per acre, $56.17. Team work, 47.9 days. Labor, 72.6 days. Value per acre of land, $44.50.

2. *Value of products.*

1	1205 bushels barley at 45 cents, av. 5 yrs.	542.25	13.556	45.00
2	40 acres straw, $1.50	60.00	1.500	4.99
	Total	602.25	15.056	49.99

3. *Surplus Value.*

Surplus value—profits	200.14	5.004	16.62

Equivalent to 8.90 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on the same and upon the value of machinery and horses used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising barley.)

Annual investment		267.29	6.682	22.18
Machinery	$146.80 at 12 per cent.	17.62	.440	1.46
Horses	52.80 at 12 per cent.	6.34	.159	.54
Annual investment	267.29 at 12 per cent.	32.08	.802	2.66
Total expenses less rent		323.33	8.083	26.84
Surplus credited to land		*278.92	6.973	23.15
		602.25	15.056	49.99

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*Capitalized at 12 per cent. equivalent to $2,324.35 or $58.11 per acre. This is $13.60 per acre above the value reported by the farmers.

In relation to the cost of producing 40 acres of barley as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XVI, covering six pages, the cost per each acre in detail, the total cost of 40 acres and the average cost per acre are presented. Table XVII is made up of the totals of table XVI. Table XVIII is a more complete analysis of table XVII, including besides the expenses of that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XIX and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost of growing one acre of wheat as computed from table XIX is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.564	1.87
Harrowing, etc.	.219	.73
Seeding	.122	.40
Cutting	.125	.42
Shocking	.168	.56
Stacking	.372	1.23
Threshing, labor	.400	1.33
Threshing, machine	.301	1.00
Marketing	.244	.81
Seed	.990	3.29
Taxes	.253	.84
Maintenance, horses	.800	2.65
Fertilizing	1.125	3.73
Other expenses	.500	1.66
Depreciation, machinery	.367	1.22
Depreciation, horses	.132	.44
Annual investment	6.682	22.18
Interest, machinery	.220	.73
Interest, horses	.079	.27
Interest, annual investment	.401	1.33
Interest, land	2.670	8.86
Total	10.052	33.37

CORN.—TABLE XX.

Cost of production and value of products of 40 acres of corn.

OFFICE NO.	PLOWING.				HARROWING AND PLANTING.				CULTIVATING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	1.00	2.50	1.00	2.70	.60	1.50	.60	1.62	1.25	3.13	1.25	3.38
2	1.40	3.50	1.40	3.78	1.13	2.83	1.13	3.06	2.00	5.00	2.00	5.40
3	1.00	1.67	1.00	1.85	.75	1.25	.75	1.39	1.25	2.08	1.25	2.32
4	.85	2.13	.85	2.24	1.22	3.05	1.22	3.21	1.12	2.80	1.12	2.95
5	1.00	2.22	1.00	2.70	.68	1.51	.68	1.84	1.65	3.67	1.65	4.46
6	.80	1.60	.80	1.78	.75	1.50	.75	1.66	.80	1.60	.80	1.78
7	1.00	2.50	1.00	2.50	.69	1.72	.69	1.72	2.10	5.26	2.10	5.26
8	1.00	2.50	1.00	2.50	.40	1.00	.40	1.00	1.60	4.00	1.60	4.00
9	.75	2.14	.75	2.14	.65	1.86	.65	1.86	1.00	2.86	1.00	2.86
10	1.60	4.00	1.60	4.00	.95	2.38	.95	2.38	.95	2.37	.95	2.37
11	1.35	3.37	1.35	3.37	.91	2.28	.91	2.28	1.44	3.60	1.44	3.60
12	1.00	2.00	1.00	2.22	.55	1.10	.55	1.22	1.20	2.40	1.20	2.67
13	1.50	4.41	1.50	4.54	.93	2.72	.93	2.84	1.50	4.41	1.50	4.54
14	1.16	2.90	1.16	3.42	1.00	2.50	1.00	2.94	1.72	4.30	1.72	5.06
15	1.00	2.23	1.00	2.28	.55	1.23	.55	1.23	1.16	2.58	1.16	2.56
16	2.00	5.00	2.00	5.00	1.22	3.05	1.22	3.05	1.30	3.25	1.30	3.25
17	1.00	2.00	1.00	2.50	.86	1.72	.86	2.15	1.00	2.00	1.00	2.50
18	1.00	2.86	1.00	3.13	.50	1.43	.50	1.56	1.00	2.85	1.00	3.12
19	1.25	2.50	1.25	3.12	1.00	2.00	1.00	2.50	1.25	2.50	1.25	3.13
20	1.00	2.22	1.00	2.50	.80	1.78	.80	2.00	1.60	3.56	1.60	4.00
21	1.20	3.00	1.20	3.16	.55	1.38	.55	1.45	1.50	3.75	1.50	3.94
22	1.24	2.95	1.24	3.03	.75	1.79	.75	1.83	1.63	3.88	1.63	3.98
23	1.37	2.74	1.37	3.26	1.38	2.76	1.38	3.29	2.25	4.50	2.25	5.36
24	1.20	2.66	1.20	2.85	1.00	2.22	1.00	2.37	2.40	5.33	2.40	5.72
25	1.00	2.00	1.00	2.22	.54	1.08	.54	1.20	1.60	3.20	1.60	3.56
26	1.00	2.22	1.00	2.38	.54	1.20	.54	1.30	2.00	4.45	2.00	4.77
27	1.13	2.82	1.13	2.69	.44	1.10	.44	1.04	1.40	3.50	1.40	3.33
28	1.00	2.50	1.00	2.64	1.25	3.13	1.25	3.29	2.50	6.25	2.50	6.57
29	1.00	3.33	1.00	3.33	.75	2.50	.75	2.50	2.00	6.67	2.00	6.67
30	1.00	2.00	1.00	2.23	.95	1.90	.95	2.09	.94	1.88	.94	2.08
31	1.25	2.23	1.25	2.78	.63	1.13	.63	1.41	1.34	2.39	1.34	2.98
32	1.00	2.00	1.00	2.38	.90	1.80	.90	2.13	1.20	2.40	1.20	2.86
33	1.50	3.00	1.50	3.57	.90	1.80	.90	2.14	2.40	4.80	2.40	5.72
34	1.25	3.12	1.25	3.57	.58	1.45	.58	1.65	2.13	5.32	2.13	6.09
35	1.00	2.50	1.00	2.64	.60	1.50	.60	1.58	1.60	4.00	1.60	4.21
36	.84	2.21	.84	2.54	.59	1.55	.59	1.78	1.37	3.61	1.37	4.15
37	1.13	2.82	1.13	2.97	.71	1.77	.71	1.86	2.25	5.63	2.25	5.92
38	1.25	2.50	1.25	2.72	1.38	2.76	1.38	3.01	1.40	2.80	1.40	3.05
39	1.25	2.60	1.25	3.13	.81	1.62	.81	2.03	2.52	5.04	2.52	6.30
40	.86	1.72	.86	2.15	.54	1.08	.54	1.35	1.00	2.00	1.00	2.50
Total 40 acres	45.13	105.07	45.13	114.46	31.93	73.93	31.93	80.81	62.32	145.62	62.32	158.99
Average one acre.	1.128	2.627	1.128	2.861	.798	1.848	.798	2.020	1.558	3.640	1.558	3.975

CORN.—TABLE XX, continued.

Cost of production and value of products of 40 acres of corn.

OFFICE NO.	CUTTING.				HUSKING.				SHELLING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years
	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.
1	1.00	2.50	1.00	2.70	1.20	3.00	1.11	3.00	.40	1.00	.37	1.00
2	.75	1.87	.75	2.03	1.20	3.00	1.11	3.00	.40	1.00	.37	1.00
3	.30	.50	.30	.55	1.80	3.00	1.62	3.00	.60	1.00	.54	1.00
4	.50	1.25	.50	1.32	1.20	3.00	1.14	3.00	.40	1.00	.38	1.00
5	1.00	2.22	1.00	2.70	1.35	3.00	1.11	3.00	.45	1.00	.37	1.00
6	.80	1.60	.80	1.75	1.50	3.00	1.35	3.00	.50	1.00	.45	1.00
7	.40	1.00	.40	1.00	1.20	3.00	1.20	3.00	.40	1.00	.40	1.00
8	.75	1.88	.75	1.88	1.20	3.00	1.20	3.00	.40	1.00	.40	1.00
9	.50	1.43	.50	1.43	1.05	3.00	1.05	3.00	.35	1.00	.35	1.00
10	.60	1.50	.60	1.50	1.20	3.00	1.20	3.00	.40	1.00	.40	1.00
11	1.20	3.00	1.20	3.00	1.20	3.00	1.20	3.00	.80	2.00	.80	2.00
12	.50	1.00	.50	1.11	1.50	3.00	1.35	3.00	.50	1.00	.45	1.00
13	.60	1.76	.60	1.82	1.02	3.00	.99	3.00	.68	2.00	.66	2.00
14	.50	1.25	.50	1.48	1.20	3.00	1.02	3.00	.40	1.00	.34	1.00
15	.84	1.86	.84	1.86	1.35	3.00	1.35	3.00	.45	1.00	.45	1.00
16	1.00	2.50	1.00	2.50	1.20	3.00	1.20	3.00	.40	1.00	.40	1.00
17	.66	1.32	.66	1.65	1.50	3.00	1.20	3.00	.50	1.00	.40	1.00
18	.66	1.89	.66	2.06	1.05	3.00	.96	3.00	.35	1.00	.32	1.00
19	.50	1.00	.50	1.26	1.00	2.00	.80	2.00	.50	1.00	.40	1.00
20	1.00	2.22	1.00	2.50	1.35	3.00	1.20	3.00	1.35	3.00	1.20	3.00
21	.87	2.17	.87	2.29	.60	1.50	.67	1.50	.60	1.50	.57	1.50
22	1.20	2.86	1.20	2.93	.84	2.00	.82	2.00	1.26	3.00	1.23	3.00
23	1.00	2.00	1.00	2.38	2.00	4.00	1.68	4.00	.75	1.50	.63	1.50
24	1.00	2.23	1.00	2.38	1.13	2.51	1.05	2.50	1.12	2.49	1.05	2.50
25	.85	1.70	.85	1.89	1.50	3.00	1.35	3.00	1.50	3.00	1.35	3.00
26	1.25	2.78	1.25	2.98	1.59	3.51	1.47	3.50	1.58	3.51	1.47	3.50
27	.78	1.95	.78	1.85	1.20	3.00	1.20	2.86	.40	1.00	.40	.96
28	.85	2.12	.85	2.24	1.20	3.00	1.14	3.00	.20	.50	.19	.50
29	1.00	3.33	1.00	3.33	.90	3.00	.90	3.00	.60	2.00	.60	2.00
30	1.00	2.00	1.00	2.23	1.50	3.00	1.35	3.00	.50	1.00	.45	1.00
31	1.00	1.79	1.00	2.22	1.12	2.00	.90	2.00	1.68	3.00	1.35	3.00
32	.75	1.50	.75	1.78	1.00	2.00	.84	2.00	1.25	2.50	1.05	2.50
33	1.05	2.10	1.05	2.50	2.00	4.00	1.68	4.00	1.50	3.00	1.26	3.00
34	.90	2.25	.90	2.57	1.20	3.00	1.05	3.00	1.00	2.50	.85	2.44
35	1.25	3.12	1.25	3.29	.80	2.00	.76	2.00	1.20	3.00	1.14	3.00
36	.28	.74	.28	.85	1.04	2.74	.99	3.00	1.04	2.74	.99	3.00
37	.50	1.25	.50	1.32	1.00	2.50	.85	2.24	.80	2.00	.76	2.00
38	1.00	2.00	1.00	2.18	1.50	3.00	1.38	3.00	1.00	2.00	.92	2.00
39	.88	1.76	.88	2.20	1.50	3.00	1.20	3.00	.75	1.50	.60	1.50
40	.60	1.20	.60	1.50	1.50	3.00	1.20	3.00	1.50	3.00	1.20	3.00
Total 40 acres....	32.07	74.40	32.07	81.03	50.38	114.76	45.74	114.60	30.46	68.74	27.57	68.90
Average one acre.	.802	1.860	.802	2.026	1.259	.2869	1.143	2.865	.761	1.718	.688	1.722

Corn.—Table XX, continued.

Cost of production and value of products of 40 acres of corn.

Office No.	Marketing.				Fertilizing.				Interest.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.40	1.00	.37	1.00	4.00	10.00	4.00	10.81	3.60	9.00	3.60	9.73
2	.30	.75	.27	.75	3.40	8.50	3.40	9.19	3.72	9.30	3.72	10.06
3	.60	1.00	.54	1.00	4.00	6.66	4.00	7.40	3.84	6.40	3.84	7.12
4	1.20	3.00	1.14	3.00	3.20	8.00	3.20	8.43	1.80	4.50	1.80	4.74
5	.90	2.00	.74	2.00	4.00	8.89	4.00	10.82	2.70	6.00	2.70	7.29
6	2.50	5.00	2.25	5.00	4.30	8.60	4.30	9.55	1.50	3.00	1.50	3.34
7	1.20	3.00	1.20	3.00	3.00	7.50	3.00	7.50	3.00	7.50	3.00	7.50
8	.40	1.00	.40	1.00	4.00	10.00	4.00	10.00	3.60	9.00	3.60	9.00
9	1.75	5.00	1.75	5.00	4.00	11.42	4.00	11.42	1.50	4.29	1.50	4.29
10	.80	2.00	.80	2.00	4.20	10.50	4.20	10.50	1.80	4.50	1.80	4.50
11	1.60	4.00	1.60	4.00	3.40	8.50	3.40	8.50	2.40	6.00	2.40	6.00
12	1.25	2.50	1.12	2.49	3.30	6.60	3.30	7.34	3.00	6.00	3.00	6.66
13	.68	2.00	.66	2.00	3.40	10.00	3.40	10.30	4.80	14.11	4.80	14.55
14	.80	2.00	.68	2.00	3.00	7.50	3.00	8.82	4.20	10.50	4.20	12.32
15	1.35	3.00	1.35	3.00	3.50	7.77	3.50	7.77	4.38	9.73	4.38	9.73
16	.80	2.00	.80	2.00	3.20	8.00	3.20	8.00	2.70	6.75	2.70	6.75
17	1.50	3.00	1.20	3.00	4.30	8.60	4.30	10.75	1.50	3.00	1.50	3.75
18	.70	2.00	.64	2.00	3.50	10.00	3.50	10.94	1.20	3.43	1.20	3.75
19	.50	1.00	.40	1.00	3.30	6.60	3.30	8.25	3.48	6.96	3.48	8.70
20	.45	1.00	.40	1.00	3.40	7.55	3.40	8.50	1.08	2.40	1.08	2.70
21	.40	1.00	.38	1.00	3.40	8.50	3.40	8.96	3.00	7.50	3.00	7.89
22	1.05	2.50	1.02	2.44	4.00	9.53	4.00	9.76	3.00	7.14	3.00	7.32
23	1.00	2.00	1.00	2.38	3.50	7.00	3.50	8.33	4.50	9.00	4.60	10.72
24	.68	1.51	.63	1.50	3.35	7.44	3.35	7.98	2.40	5.33	2.40	5.72
25	.50	1.00	.45	1.00	3.30	6.60	3.30	7.33	3.90	7.80	3.90	8.66
26	.90	2.00	.84	2.00	3.50	7.78	3.50	8.34	3.42	7.60	3.42	8.14
27	.40	1.00	.40	.96	4.20	10.50	4.20	10.00	2.70	6.75	2.70	6.43
28	.20	.50	.19	.50	3.20	6.00	3.20	8.42	3.60	9.00	3.60	9.48
29	.60	2.00	.60	2.00	3.00	10.00	3.00	10.00	3.18	10.60	3.18	10.60
30	.50	1.00	.45	1.00	5.50	11.00	5.50	12.23	3.60	7.20	3.60	8.00
31	.56	1.00	.45	1.00	3.60	6.43	3.60	8.00	4.50	8.03	4.50	10.00
32	1.25	2.50	1.05	2.50	3.30	6.60	3.30	7.86	1.80	3.60	1.80	4.29
33	.50	1.00	.42	1.00	3.50	7.00	3.50	8.33	3.30	6.60	3.30	7.86
34	1.20	3.00	1.05	3.00	3.50	8.75	3.50	10.00	3.12	7.80	3.12	8.91
35	.80	2.00	.76	2.00	3.20	8.00	3.20	8.42	3.90	9.75	3.90	10.26
36	.76	2.00	.66	2.00	3.00	7.89	3.00	9.09	3.75	9.86	3.75	11.37
37	.40	1.00	.38	1.00	3.50	8.75	3.50	9.22	3.96	9.90	3.96	10.42
38	2.00	4.00	1.84	4.00	3.30	6.60	3.30	7.18	3.60	7.20	3.60	7.83
39	1.00	2.00	.80	2.00	3.25	6.50	3.25	8.13	5.70	11.40	5.70	14.23
40	1.50	3.00	1.20	3.00	3.40	6.80	3.40	8.50	3.24	6.48	3.24	8.10
Total 40 acres	35.88	82.26	32.88	82.52	142.90	330.86	142.90	360.87	125.97	290.91	125.97	318.71
Average one acre	.899	2.056	.822	2.063	3.572	8.271	3.572	9.022	3.149	7.273	3.149	7.968

CORN.—TABLE XX, continued.

Cost of production and value of products of 40 acres of corn.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 4 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	.60	1.50	.60	1.62	.25	.62	.25	.68	.50	1.25	.50	1.35
2	.60	1.50	.60	1.62	.25	.62	.25	.67	.50	1.25	.50	1.35
3	.25	.42	.25	.46	.25	.42	.25	.46	.50	.83	.50	.93
4	.34	.85	.34	.89	.25	.62	.25	.65	.50	1.25	.50	1.31
5	.33	.74	.33	.89	.25	.55	.25	.68	.50	1.11	.50	1.35
6	.33	.66	.33	.74	.25	.50	.25	.55	.50	1.00	.50	1.11
7	.25	.62	.25	.62	.25	.62	.25	.62	.50	1.25	.50	1.25
8	.30	.75	.30	.75	.25	.62	.25	.62	.50	1.25	.50	1.25
9	.17	.49	.17	.49	.25	.71	.25	.71	.50	1.42	.50	1.42
10	.15	.38	.15	.38	.25	.62	.25	.62	.50	1.25	.50	1.25
11	.33	.83	.33	.83	.25	.62	.25	.62	.50	1.25	.50	1.25
12	.40	.80	.40	.89	.25	.50	.25	.55	.50	1.00	.50	1.11
13	.20	.58	.20	.60	.25	.74	.25	.75	.50	1.49	.50	1.51
14	.50	1.25	.50	1.48	.30	.75	.30	.88	.50	1.25	.50	1.48
15	.58	1.29	.58	1.29	.30	.66	.30	.66	.50	1.11	.50	1.11
16	.47	1.18	.47	1.18	.25	.62	.25	.62	.50	1.25	.50	1.25
17	.25	.50	.25	.63	.25	.50	.25	.62	.50	1.00	.50	1.25
18	.26	.74	.26	.81	.25	.71	.25	.78	.50	1.43	.50	1.57
19	.60	1.20	.60	1.50	.25	.50	.25	.62	.50	1.00	.50	1.25
20	.22	.49	.22	.55	.25	.55	.25	.62	.50	1.11	.50	1.25
21	.33	.83	.33	.87	.25	.62	.25	.65	.50	1.25	.50	1.31
22	.23	.54	.23	.57	.25	.59	.25	.62	.50	1.19	.50	1.22
23	.50	1.00	.50	1.19	.25	.50	.25	.59	.50	1.00	.50	1.19
24	.38	.85	.38	.91	.25	.56	.25	.59	.50	1.11	.50	1.19
25	.40	.80	.40	.89	.25	.50	.25	.56	.50	1.00	.50	1.11
26	.27	.60	.27	.64	.25	.55	.25	.59	.50	1.11	.50	1.19
27	.16	.40	.16	.38	.25	.63	.25	.59	.50	1.25	.50	1.19
28	.17	.43	.17	.45	.25	.62	.25	.65	.50	1.25	.50	1.31
29	.35	1.17	.35	1.17	.25	.83	.25	.83	.50	1.67	.50	1.67
30	.13	.26	.13	.29	.25	.50	.25	.56	.50	1.00	.50	1.11
31	.07	.18	.07	.16	.25	.44	.25	.55	.50	.89	.50	1.11
32	.24	.48	.24	.58	.25	.58	.25	.59	.50	1.00	.50	1.19
33	.42	.84	.42	1.00	.25	.50	.25	.59	.50	1.00	.50	1.19
34	.49	1.23	.49	1.40	.25	.63	.25	.71	.50	1.25	.50	1.43
35	.22	.55	.22	.57	.25	.63	.25	.66	.50	1.25	.50	1.32
36	.50	1.32	.50	1.52	.25	.65	.25	.76	.50	1.32	.50	1.51
37	.75	1.88	.75	1.97	.25	.62	.25	.66	.50	1.25	.50	1.31
38	1.00	2.00	1.00	2.18	.25	.50	.25	.54	.50	1.00	.50	1.09
39	.80	1.60	.80	2.00	.25	.50	.25	.63	.50	1.00	.50	1.25
40	.12	.24	.12	.30	.25	.50	.25	.63	.50	1.00	.50	1.24
Total 40 acres	14.66	33.92	14.66	37.25	10.10	23.10	10.10	25.53	20.00	46.54	20.00	50.73
Average one acre	.366	.848	.366	.931	.25	.587	.25	.638	.50	1.163	.50	1.268

CORN.—TABLE XX, continued.

Cost of production and value of products of 40 acres of corn.

OFFICE No.	TOTAL COST OF RAISING PRODUCT.				VALUE OF STALK.				VALUE OF CORN.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 $	Acre 5 years $	Bush 5 years $
1	14.80	37.00	14.65	39.59	6.06	15.15	6.06	16.38	9.20	.23	13.32	.36
2	15.65	39.12	15.60	41.91	6.08	15.20	6.08	16.32	9.20	.23	13.69	.37
3	15.14	25.23	14.84	27.48	7.80	13.00	7.80	14.44	15.00	.25	11.90	.35
4	12.58	31.45	12.44	32.74	6.80	17.00	6.80	17.89	10.00	.25	13.30	.35
5	14.81	32.91	14.33	38.73	6.40	14.22	6.40	17.29	11.25	.25	12.95	.35
6	14.53	29.06	14.08	31.29	7.65	15.30	7.65	17.00	12.50	.25	15.75	.35
7	13.99	34.97	13.99	34.97	6.40	16.00	6.40	16.00	10.00	.25	14.00	.35
8	14.40	36.00	14.40	36.00	6.00	15.00	6.00	15.00	10.00	.25	14.00	.35
9	12.47	35.52	12.47	35.62	5.92	16.91	5.92	16.91	10.50	.30	12.95	.37
10	13.40	33.50	13.40	33.50	6.00	15.00	6.00	15.00	11.20	.28	14.00	.35
11	15.38	38.45	15.38	38.45	5.60	14.00	5.60	14.00	10.00	.25	12.00	.30
12	13.95	27.90	13.62	30.26	6.75	13.50	6.75	15.00	13.00	.26	16.65	.37
13	16.06	47.22	15.99	48.45	6.00	17.65	6.00	18.18	7.82	.23	11.88	.36
14	15.28	38.20	14.92	43.88	6.44	13.60	6.44	16.00	8.80	.22	12.24	.36
15	15.96	35.46	15.96	35.46	6.20	13.77	6.20	13.77	9.90	.22	16.20	.36
16	15.04	37.60	15.04	37.60	6.00	15.00	6.00	15.00	10.00	.25	13.20	.33
17	13.82	27.64	13.12	32.80	6.00	12.00	6.00	15.00	11.00	.22	14.00	.35
18	10.97	31.34	10.79	33.72	5.00	14.28	5.00	15.62	8.05	.23	10.88	.34
19	14.13	28.26	13.73	34.32	5.80	16.00	5.80	14.50	11.50	.23	12.80	.32
20	13.00	28.88	12.65	31.62	6.00	13.33	6.00	15.00	11.[illegible]	.26	14.80	.37
21	13.20	33.00	13.12	34.52	6.70	14.25	6.70	15.00	10.40	.26	13.30	.35
22	15.95	37.97	15.87	38.70	6.00	14.28	6.00	14.63	10.50	.25	14.76	.36
23	19.00	38.00	18.56	44.19	7.00	14.00	7.00	16.66	11.60	.23	15.12	.36
24	15.41	34.24	15.21	36.21	6.00	13.33	6.00	14.28	11.70	.26	14.70	.35
25	15.84	31.68	15.49	34.42	6.75	13.50	6.75	15.00	12.00	.24	16.65	.37
26	16.79	37.31	16.51	39.33	6.40	14.22	6.40	15.23	11.25	.25	15.12	.36
27	13.56	33.90	13.56	32.28	6.72	16.80	6.72	16.00	10.40	.26	15.12	.36
28	14.92	37.30	14.64	39.05	6.00	15.00	6.00	15.79	10.40	.26	14.06	.37
29	14.13	47.10	14.13	47.10	4.80	16.00	4.80	16.00	7.80	.26	10.50	.35
30	16.37	32.74	16.12	35.82	7.20	14.40	7.20	16.00	12.50	.25	15.75	.35
31	16.50	29.46	15.84	35.20	6.00	10.71	6.00	13.33	13.44	.24	16.20	.36
32	13.44	26.96	12.88	30.66	6.80	13.60	6.80	16.19	12.50	.25	15.12	.36
33	17.82	35.64	17.18	40.90	6.90	13.80	6.90	16.43	11.00	.22	15.12	.36
34	16.12	40.30	15.67	44.77	6.95	17.37	6.95	19.85	9.60	.24	12.60	.36
35	15.32	38.30	15.18	39.95	6.20	15.50	6.20	16.31	10.00	.25	14.06	.37
36	13.92	36.63	13.72	41.57	4.80	12.63	4.80	14.54	9.50	.25	11.88	.36
37	15.75	39.37	15.54	40.89	6.40	16.00	6.40	16.84	11.20	.28	12.92	.34
38	18.18	36.36	17.82	38.78	6.06	12 12	6.06	13.17	12.60	.25	16.56	.36
39	19.21	38.42	18.56	46.40	6.40	12.80	6.40	16.00	12.50	.25	14.40	.36
40	15.01	30.02	14.11	35.27	6.30	12.60	6.30	15.75	12.50	.25	14.40	.36
Total 40 acres.	601.80	1390.5	591.21	1494.4	249.28	578.82	249.28	627.30	433.81	991.00	558.85	14.18
Average one acre.	12.045	34.763	14.780	37.360	6.232	14.47	6.232	15.68	10.845	.2477	13.971	.354

CORN.—TABLE XX, continued.

Cost of production and value of products of 40 acres of corn.

Office No.	Total Value of Product.				Profit.				Loss.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	15.26	38.15	19.38	52.38	.46	1.15	4.73	12.79	......	......	......	......
2	15.28	38.20	19.77	53.32	......	......	4.27	11.41	.37	.92	......	......
3	22.60	38.00	19.70	49.44	7.66	12.77	4.86	21.96	......	......	......	......
4	16.80	42.00	[illegible].10	52.8[illegible]	4.22	10.55	7.66	20.15	......	......	......	......
5	17.65	39.22	19.35	52.29	2.84	6.31	5.02	13.56	......	......	......	......
6	20.15	40.30	23.40	52.00	5.62	11.24	9.32	20.71	......	......	......	......
7	16.40	41.00	20.40	51.00	2.41	6.03	6.41	16.03	......	......	......	......
8	16.00	40.00	20.00	50.00	1.60	4.00	5.60	14.00	......	......	......	......
9	16.42	46.91	18.87	53.91	3.95	11.29	6.40	18.29	......	......	......	......
10	17.20	43.00	20.00	50.00	3.80	9.50	6.60	16.50	......	......	......	......
11	15.60	39.00	17.60	44.00	.22	.55	2.22	5.55	......	......	......	......
12	19.75	39.50	23.40	52.00	5.80	11.60	9.78	21.74	......	......	......	......
13	18.82	40.65	17.88	54.18	......	......	1.89	5.73	2.24	6.57	......	......
14	14.24	35.60	17.68	52.00	......	......	2.76	8.12	1.04	2.60	......	......
15	16.10	35.77	22.40	49.77	.14	.31	6.44	14.31	......	......	......	......
16	16.00	40.00	19.20	48.00	.96	2.40	4.16	10.40	......	......	......	......
17	17.00	34.00	20.00	50.00	3.18	6.36	6.88	17.20	......	......	......	......
18	13.05	37.28	15.88	49.62	2.08	5.94	5.09	15.90				
19	17.30	39.00	18.60	46.50	3.17	10.74	4.87	12.18	......	......	......	......
20	17.70	39.33	20.80	52.00	4.70	10.45	8.15	20.38	......	......	......	......
21	16.10	40.25	19.00	50.00	2.90	7.25	5.88	15.48	......	......	......	......
22	16.50	39.28	20.76	50.67	.65	1.31	4.89	11.93	......	......	......	......
23	18.50	37.00	22.12	52.66	......	......	3.56	8.47	.50	1.00	......	......
24	17.70	39.33	20.70	49.28	2.29	5.09	6.49	13.07	......	......	......	......
25	18.75	37.50	23.40	52.00	2.91	5.82	7.91	17.58	......	......	......	......
26	17.65	39.22	21.52	51.23	.86	1.91	5.01	11.90	......	......	......	......
27	17.12	42.80	21.84	52.00	3.56	8.90	8.28	19.72	......	......	......	......
28	16.40	41.00	20.06	52.79	1.48	3.70	6.22	13.74	......	......	......	......
29	12.60	42.00	15.30	51.00	......	......	1.17	3.90	1.53	5.10	......	......
30	19.70	39.40	22.95	51.00	3.33	6.66	6.83	15.18	......	......	......	......
31	19.44	34.71	22.20	49.33	2.94	5.25	6.36	14.13	......	......	......	......
32	19.30	38.60	21.92	52.19	5.86	11.64	9.04	21.53	......	......	......	......
33	17.90	35.80	22.02	52.43	.08	.16	4.84	11.53	......	......	......	......
34	16.56	41.37	19.55	55.85	.43	1.07	3.88	11.08	......	......	......	......
35	16.20	40.50	20.26	53.31	.88	2.20	5.08	13.36	......	......	......	......
36	14.30	37.63	16.68	50.54	.38	1.00	2.96	8.97	......	......	......	......
37	17.60	44.00	19.32	50.84	1.85	4.63	3.78	9.95	......	......	......	......
38	18.56	37.12	22.62	49.17	.38	.76	4.80	10.39	......	......	......	......
39	18.90	37.80	20.80	52.00	......	......	2.24	5.60	.31	.62	......	......
40	18.80	37.60	20.70	51.75	3.79	7.58	6.59	16.48	......	......	......	......
Total 40 acres.	683.09	1569.8	808.13	2045.3	87.28	196.12	216.92	550.90	5.99	16.81	......	......
Average one acre.	17.077	39.244	20.203	51.13	2.182	4.903	5.423	13.771	.149	.420	......	......

TABLE XXI.—SUMMARY OF TABLE XX.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 40 acres of corn and the average cost per acre and bushel, the total value of products of 40 acres and the average value per acre and bushel. In the analysis of expenses, wages was allowed for team work as well as for labor.

(For a complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	40 acres. 1896.	One acre.	Bush.	40 acres. 5 years	One acre.	Bush.
	$	$	Cts.	$	$	Cts.
Plowing	45.13	1.128	2.63	45.13	1.128	2.86
Harrowing	31.93	.798	1.85	31.93	.798	2.02
Cultivating	62.32	1.558	3.64	62.32	1.558	3.97
Cutting	32.07	.802	1.86	32.07	.802	2.03
Husking	50.38	1.259	2.87	45.74	1.143	2.87
Shelling	30.46	.762	1.72	27.51	.689	1.72
Marketing	35.88	.899	2.06	32.88	.823	2.06
Fertilizing	142.90	3.572	8.27	142.90	3.572	9.02
Interest	125.97	3.149	7.27	125.97	3.149	7.97
Wear and tear	14.66	.366	.85	14.66	.366	.93
Taxes	10.10	.252	.59	10.10	.252	.64
Other expenses	20.00	.500	1.16	20.00	.500	1.27
Total	601.80	15.046	34.77	591.21	14.780	37.36

Value of products.

Value of grain	433.81	10.85	2.477	558.85	1.397	35.45
Value of straw	249.28	6.23	1.447	249.28	.623	15.68
Total value	683.09	17.08	3.924	808.13	2.020	51.13

Profit and Loss.

Profit	87.28	2.182	4.903	216.92	5.423	13.77
Loss	5.99	.149	.420	....	....	....
Balance profit	81.29	2.033	4.483	216.92	5.423	13.77

TABLE XXII.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF CORN.

The data upon which the calculations in the tables on this page are based may also be found in tables 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Products" is shown in table 2. Table 3 shows the surplus value or cost, as the case may be. In table 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		40 acres.	One acre.	Bush.
			$	$	Cts.
1	Plowing	185 hours at 23.5 cents	43.48	1.087	2.72
2	Harrowing, etc.	89 hours at 23.5 cents	20.92	.523	1.31
3	Planting	53 hours at 23.5 cents	12.46	.311	.78
4	Cultivating	274 hours at 23,5 cents	64.39	1.610	4.03
5	Cutting, man and team	72 hours at 23.5 cents	16.92	.423	1.06
6	Cutting, extra man	72 hours a 12.2 cents	8.78	.219	.55
7	Husking	388 hours at 12.2 cents	47.37	1.184	2.97
8	Shelling	1596 bush. at 1.3 cents	20.74	.520	1.30
9	Marketing	139 hours at 23.5 cents	32.67	.817	2.05
10	Seed	7.5 bush. at 40 cents	3.00	.075	.19
11	Fertilizing, clover and	86 loads manure	50.00	1.250	3.13
12	Taxes	40 acres at 25.3 cents	10.12	.253	.64
13	Other expenses	40 acres at 50 cents	20.00	.600	1.26
14	Depreciation, machinery	146.80 dollars at 10 per cent.	14.68	.367	.91
	Annual investment		365.53	9.138	22.90
15	Interest, machinery,	146.80 dollars at 6 per cent.	8.81	.220	.55
16	Interest, an. investment.	365.53 dollars at 6 per cent.	21.93	.548	1.37
17	Interest, land	1,780.00 dollars at 6 per cent.	106.80	2.670	6.69
	Total		503.07	12.576	31.51

Total investment, $2,292.33. Average investment per acre, $57.30. Team work, 81.2 days. Labor, 127.2 days. Value per acre of land, $44.50.

2. *Value of products.*

1	1596 bushels of corn at 35.4 cents, av. 6 yrs	564.98	14.124	35.40
2	40 acres of stalks, $3.25	130.00	3.250	8.14
	Total	694.98	17.374	43.54

3. *Surplus Value.*

1	Surplus value—profit	191.91	4.798	12.03

Equivalent to 8.37 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value for the land for raising corn.)

Annual investment		365.53	9.138	22.90
Machinery	$146.80 at 12 per cent.	17.62	.440	1.10
Annual investment	365.53 at 12 per cent.	43.86	1.097	2.75
Total expenses less rent		427.01	10.675	26.75
Surplus credited to land		*267.97	6.699	16.79
		694.98	17.374	43.54

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*Capitalized at 12 per cent. equivalent to $2,233.08 or $55.82 per acre. This is $11.32 per acre above the value reported by the farmers.

TABLE XXIII.—COST OF PRODUCTION AND VALUE OF 40 ACRES OF CORN.

The data upon which the calculations in the table on this page are based may also be found in tabels 1, 2, 3. "Cost of Production" is shown in table 1. "Value of Product" is shown in table 2. Table 3 shows the "Surplus Value" above cost. In table 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.	40 acres.	One acre.	Bush.
		$	$	Cts.
1	Plowing .... 185 hours at 12.2 cents	22.57	.564	1.41
2	Harrowing, etc. .... 89 hours at 12.2 cents	10.86	.272	.68
3	Planting .... 53 hours at 12.2 cents	6.47	.162	.40
4	Cultivating .... 274 hours at 12.2 cents	33.43	.836	2.09
6	Cutting, man and team .... 72 hours at 12.2 cents	8.74	.218	.55
6	Cutting, extra man .... 72 hours at 12.2 cents	8.74	.218	.55
7	Husking .... 388 hours at 12.2 cents	47.34	1.184	2.97
8	Shelling ....1596 bush. at 1.3 cents	20.74	.518	1.30
9	Marketing .... 139 hours at 12.2 cents	16.96	.424	1.06
10	Seed .... 7.5 bush. at 40 cents	3.00	.075	.19
11	Taxes .... 40 acres at 25.3 cents	10.12	.253	.64
12	Maintenance horses .... 40 acres at 80 cents	32.00	.800	2.01
13	Fertilizing, clover and .... 86 loads manure.....	50.00	1.250	3.13
14	Other expenses .... 40 acres at 50 cents	20.00	.500	1.25
15	Depreciation, machinery ..146.80 dollars at 10 per cent.	14.68	.367	.91
16	Depreciation, horses ..... 52.80 dollars at 10 per cent.	5.28	.132	.33
	Annual investment	310.93	7.773	19.48
17	Interest, machinery ..... 146.80 dollars at 6 per cent.	8.81	.220	.55
18	Interest, horses .... 52.80 dollars at 6 per cent.	3.17	.079	.20
19	Interest, an. investment.. 310.93 dollars at 6 per cent.	18.66	.466	1.17
20	Interest, land ....1,780.00 dollars at 6 per cent.	106.80	2.670	6.69
	Total	448.37	11.209	28.09

Total investment, $2,290.53. Average investment per acre, $57.26. Team work, 81 days. Labor, 127 days. Value per acre of land, $44.50.

2. *Value of products.*

1	1596 bushels corn at 35.4 cents, av. 6 yrs..........	564.98	14.124	35.40
2	40 acres stalks at $3.25..........	130.00	3.250	8.14
	Total	694.98	17.374	43.54

3. *Surplus Value.*

1	Surplus value—profit	246.61	6.165	15.45

Equivalent to 10.77 per cent. on capital invested.

Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of products above the sum of these expenses. (This surplus capitalized at 12 per cent. and credited to the land gives the value of the land for raising corn.)

Annual investment	310.93	7.773	19.48
Machinery ....$146.80 at 12 per cent.	17.62	.440	1.10
Horses .... 52.80 at 12 per cent.	6.34	.159	.40
Annual investment .... 310.93 at 12 per cent.	37.32	.933	2.34
Total expenses less rent..........	372.21	9.305	23.32
Surplus credited to land..........	*322.77	8.069	20.22
	694.98	17.374	43.54

*Capitalized at 12 per cent. equivalent to $2,523.08 or $63.08 per acre. This is $18.50 per acre above the value reported by the farmers.

In relation to the cost of producing 40 acres of corn as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XX, covering six pages, the cost per each acre in detail, the total cost of 40 acres and the average cost per acre are presented. Table XXI is made up of the totals of table XX. Table XXII is a more complete analysis of table XXI, including besides the expenses of that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XXIII and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost of growing one acre of wheat as computed from table XXIII is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.564	1.41
Harrowing, etc.	.272	.68
Planting	.162	.40
Cultivating	.836	2.09
Cutting, man and team	.218	.55
Cutting, extra man	.218	.55
Husking and crib	1.184	2.97
Shelling	.518	1.30
Marketing	.424	1.06
Seed	.075	.19
Taxes	.253	.64
Maintenance, horses	.800	2.01
Fertilizing	1.250	3.13
Other expenses	.500	1.26
Depreciation, machinery	.367	.91
Depreciation, horses	.132	.33
Annual investment	7.773	19.48
Interest, machinery	.220	.55
Interest, horses	.079	.20
Interest, annual investment	.467	1.17
Interest, land	2.670	6.69
Total	11.209	28.09

TABLE XXIV.

Data upon which cost of production and value of products, as shown in tables 27, 31, 35, 39, and 43, are based.

OFFICE NO.	WHEAT, ETC.									
	PLOWING.		HARROWING AND SEEDING.		CUTTING.		SHOCKING AND STACKING.			
	Time and wages for man and team.		Time and wages for man and team.		Time and wages for man and team.		Time and wages 1 man.		Time and wages 2 men and team.	
	Hours worked	Wages per hour	Hours worked	Wages per hour.	Hours worked	Wages per hour.	Hours worked.	Wages per hour	Hours worked.	Wages per hour
		Cts.		Cts.		Cts.		Cts.		Cts.
1	38.5	25.2	22.2	24.	8.5	27.7	10.6	12.2	12.	35.7
2	43.5	24.7	23.3	24.	9.8	24.7	10.	11.5	12.5	33.7
3	43.4	24.	26.5	23.5	9.	27.5	10.5	12.2	10.1	35.2
4	47.	25.2	30.	23.2	9.2	28.5	13.	12.	13.	36.2
5	45.5	24.2	22.5	25.5	9.	26.2	10.5	12.5	12.	36.5
6	48.	23.5	24.6	23.5	10.	28.	13.	11.3	15.	34
7	44.6	21.4	24.8	22.6	9.	25.3	10.	10.6	11.4	32.
8	44.8	24.	28.7	24.5	9.8	27.8	11.5	12.	12.4	36.
9	44.4	23.	25.	23.5	9.7	27.5	10.	12.	15.4	34.6
10	42.1	23.	25.8	21.5	9.8	26.	10.4	12.	12.3	34.
11	48.	22.	23.3	25.1	10.	27.	12.5	11.4	14.	33.4
12	50.	22.5	24.	23.	9.4	27.	11.7	11.4	12.5	33.4
13	43.4	23.5	26.9	23.8	10.3	26.7	11.6	11.7	14.	35.
14	43.	24.	23.	23.4	8.6	26.7	12.3	11.5	11.6	34.
15	41.7	26.5	23.3	25.1	10.0	27.7	13.	11.3	14.	35.3
16	41.7	23.2	20.6	24.	8.5	27.	11.7	11.3	12.8	33.2
17	65.	23.9	25.9	24.	10.7	27.	10.8	12.2	16.	36.1
18	42.	25.7	27.2	24.5	9.4	25.7	12.	11.8	13.5	34.8
19	48.	24.7	25.1	24.5	10.3	27.2	13.	12.1	16.	35.8
20	46.	24.7	24.5	24.	10.	27.7	11.5	12.	13.	36.
21	52.	22.	23.7	21.	10.4	24.8	11.8	10.	13.7	30.7
22	50.	23.7	25.6	24.2	10.	26.5	13.5	11.4	15.	34.
23	47.6	25.	25.9	24.5	9.6	27.5	12.3	12.	14.6	36.
24	60.5	27.2	20.8	24.	9.1	26.5	12.	11.	13.3	33.5
25	45.4	22.	22.9	22.8	9.6	27.	10.6	12.9	15.4	32.5
26	43.2	22.5	25.6	22.5	9.6	26.2	10.7	11.2	12.1	33.7
27	43.6	23.2	22.8	24.	9.7	26.5	11.2	12.	12.6	35.
28	45.9	24.	25.2	25.	9.7	28.	13.2	12.	14.4	35.
29	41.	24.7	25.7	23.4	10.4	26.7	12.	12.1	15.	35.3
30	47.6	23.7	27.4	23.	9.5	26.2	11.6	12.	11.5	34.7
31	47.2	24.	26.2	24.5	9.3	27.	11.4	13.	12.7	36.
32	44.9	23.	22.7	23.	10.3	26.	12.3	12.	12.	34.
33	45.3	25.	26.	25.	9.5	29.	11.6	12.	12.	37.
34	62.8	22.7	26.	22.7	10.8	24.7	10.3	12.	13.	32.
35	47.6	24.	23.4	24.	10.2	28.	11.8	12.	16.3	35.
36	46.5	24.	26.1	23.9	10.	28.	12.3	12.5	12.3	36.
37	43.4	23.8	22.	23.2	9.3	27.	11.	12.8	12.3	36.
38	41.6	26.	21.1	25.5	9.4	28.	11.5	12.	13.7	37.
39	32.3	31.7	24.8	27.6	10.1	29.2	11.4	11.5	12.8	38.
40	32.3	28.7	19.7	27.6	8.2	26.7	10.	12.5	12.6	37.
Total.	1811.3	969.9	979.8	957.0	385.7	1080.4	462.1	473.9	490.1	1391.9
Average.	45.28	24.15	24.49	23.92	9.64	27.01	11.55	11.85	12.25	34.79

TABLE XXIV, continued.

Data upon which cost of production and value of products, as shown in tables 27, 31, 35, 39, and 43, are based.

OFFICE NO.	CORN.									
	PLOWING.		HARROWING AND PLANTING.				CULTIVATING.		CUTTING.	
	Time and wages for man and team.		Time and wages for man and team.				Time and wages for man and team.		Time and wages.	
			Harrowing.		Planting.					
	Hours worked	Wages per hour.	Hours worked.	Wages per hour	Hours worked.	Wages per hour	Hours worked	Wages per hour.	Hours worked	Wages per hour.
		Cts.		Cts.		Cts.		C's.		Cts.
1	38.5	25.2	16.	25.	85.	20.5	68.8	22.2	63.8	12.
2	43.5	24.7	18.2	24.8	11.4	18.1	60.2	22.2	68.	11.5
3	43.4	24.	19.5	24.5	11.7	16.7	60.	22.2	65.	12.5
4	47.	25.2	23.2	23.2	12.	18.2	56.6	21.5	65.	13.
5	45.6	24.5	17.6	27.2	14.5	14.5	53.	24.	25.4	24.
6	48.	23.5	19.	24.	10.	19.2	72.	23.6	66.	11.
7	44.6	21.4	18.1	22.4	10.6	17.5	48.7	21.4	19.	17.5
8	44.8	24.	21.7	25.3	9.2	20.	49.3	24.	62.3	12.2
9	44.4	23.7	23.8	24.6	10.	20.	44.	23.	65.6	12.
10	42.1	23.	21.1	22.4	10.	18.5	47.8	23.	65.	12.
11	48.	22.	19.8	24.5	13.	16.7	52.	21.7	77.	11.3
12	50.	22.5	18.	24.	13.	15.6	67.	22.	66.	11.4
13	43.4	23.5	16.	24.	15.	15.5	48.	22.6	71.	11.7
14	43.	24.	19.2	23.7	9.3	18.5	69.	21.6	71.	11.5
15	41.7	26.5	20.	25.2	12.5	16.3	64.	23.4	34.	14.1
16	41.7	23.2	17.	24.7	12.	16.5	50.	22.7	40.	13.6
17	55.	23.9	22.	24.	11.6	17.2	58.8	23.	71.	12.2
18	42.	25.7	22.5	25.	17.	18.9	53.3	23.	29.7	13.9
19	48.	24.7	18.7	24.8	10.	20.	60.2	22.6	62.	12.1
20	46.	24.9	21.	24.5	11.	30.	60.	22.7	48.	14.
21	52.	22.	17.	21.7	13.	16.	64.	20.7	77.	10.
22	50.	23.7	19.2	25.5	13.	15.8	60.	22.6	46.	14.
23	47.6	25.	19.5	25.5	10.7	20.	59.9	23.6	40.5	14.
24	60.5	27.2	14.8	24.	9.2	18.5	42.	22.5	29.8	15.5
25	45.4	23.	20.4	23.5	14.	15.5	65.	21.2	62.6	12.
26	47.6	22.5	22.9	22.5	8.8	23.5	55.4	22.5	67.	11.
27	43.6	23.2	18.9	24.7	6.9	20.5	48.4	23.7	30.4	15.6
28	45.9	24.	20.8	26.	10.6	20.	63.	24.	25.4	25.
29	41.	24.7	25.	23.7	11.6	18.1	62.3	21.	66.6	12.2
30	47.6	23.7	18.5	23.7	13.5	15.7	54.6	20.	62.	12.
31	47.2	24.	19.3	25.	10.	21.	53.7	23.	41.7	15.
32	44.9	23.	15.5	24.	12.5	15.	46.7	22.	48.3	12.
33	45.3	25.	18.	25.	8.3	24.	48.9	25.	58.5	12.
34	52.8	22.7	16.2	22.7	13.3	15.2	35.	21.7	64.5	11.4
35	47.6	24.	17.	24.	13.6	15.	47.7	24.	43.	12.
36	46.5	24.	17.9	23.7	20.	13.7	56.6	23.3	53.8	12.5
37	43.	23.8	16.6	23.7	8.8	19.5	50.5	22.8	66.5	12.8
38	41.6	26.	14.3	28.	10.5	20.	44.4	25.	39.2	14.
39	32.3	31.7	18.	28.2	12.5	17.2	48.5	26.	48.	12.
40	32.3	28.7	15.4	29.2	8.3	23.4	64.3	24.7	28.9	17.5
Total.	1795.3	987.	759.6	979.9	463.4	729.55	2179.5	909.	2112.1	526.3
Average.	44.88	24.7	18.99	24.49	11.58	18.239	54.49	22.7	52.80	13.16

TABLE XXIV, continued.

Data upon which cost of production and value of products, as shown in tables 27, 31, 35, 39, and 43, are based.

OFFICE NO.	SEED—QUANTITY USED PER ACRE.				Value per acre of land.	Value per acre of machinery and tools used.
	Wheat. Bushels.	Oats. Bushels.	Rye. Bushels.	Barley. Bushels.		
1	1.8	2.7	1.55	2.07	$51.00	$6.85
2	1.75	2.6	1.7	2.25	43.50	3.67
3	1.7	2.4	1.4	2.00	44.50	6.86
4	1.5	2.57	1.52	2.00	52.16	4.90
5	1.71	2.55	1.65	2.12	62.00	5.20
6	1.7	2.55	1.8	2.1	51.80	5.00
7	1.82	2.65	1.45	1.9	51.00	6.83
8	1.7	2.7	1.6	2.0	55.00	4.00
9	1.55	2.22	1.75	2.1	56.00	4.65
10	1.6	2.5	2.0	2.0	55.50	4.65
11	1.35	2.4	1.65	2.1	49.00	4.40
12	1.6	2.4	1.65	2.2	45.50	4.00
13	1.8	2.6	1.8	2.0	56.50	4.50
14	1.6	2.25	1.7	2.0	46.80	4.00
15	1.75	2.65	1.7	2.3	61.10	2.70
16	1.6	2.5	1.5	2.0	43.00	4.48
17	1.7	2.3	1.6	2.05	51.50	5.60
18	1.7	2.4	1.77	2.2	55.50	3.96
19	1.75	2.25	1.6	2.0	46.00	4.50
20	1.6	2.6	1.35	2.1	55.00	3.50
21	1.7	2.4	1.7	2.0	51.70	3.30
22	1.8	2.45	1.75	2.3	54.50	4.50
23	1.9	2.6	1.9	2.3	60.80	4.60
24	1.7	2.6	1.8	2.0	61.50	4.73
25	1.75	2.4	1.5	2.16	38.30	3.85
26	1.8	2.5	2.0	2.2	52.50	4.00
27	2.0	2.7	1.6	2.2	58.80	5.37
28	1.7	2.6	1.8	2.1	52.50	4.00
29	1.87	2.75	1.87	2.27	51.50	5.75
30	1.9	2.5	1.7	2.22	53.50	3.60
31	2.0	2.8	1.8	2.0	50.50	6.63
32	1.8	2.5	1.6	2.2	48.90	4.00
33	2.0	2.7	1.7	2.1	52.50	4.16
34	1.75	2.58	1.58	2.0	59.00	5.73
35	2.0	2.4	1.8	2.0	56.50	5.50
36	1.7	2.55	1.55	2.2	61.00	5.13
37	1.8	2.5	1.7	2.1	52.50	4.87
38	1.8	2.7	1.7	2.1	58.00	3.74
39	1.6	2.5	1.6	2.1	43.50	3.57
40	1.7	2.8	1.5	2.0	51.50	4.60
Total.	69.35	100.98	65.815	84.03	2091.86	185.84
Average.	1.73	2.52	1.64	2.10	52.296	4.646

TABLE XXIV.

Data upon which cost of production and value of products, as shown in tables 27, 31, 35, 39, and 43, are based.

OFFICE NO.	YIELD PER ACRE.									
	Wheat. Bushels.		*Oats.* Bushels.		*Rye.* Bushels.		*Barley.* Bushels.		*Corn.* Bushels.	
	1896	Aver. 5 years	1896	Aver. 5 years	1896	Aver. 5 years	1896	Aver. 5 years	1896	Aver. 5 years
1	18.2	17.4	48.7	44.1	21.1	19.4	33.4	31.4	48.1	42.
2	17.1	16.1	41.0	37.5	20.	18.	29.8	29.	39.3	42.3
3	17.9	16.8	39.3	34.5	18.2	17.	29.8	27.7	43.0	38.1
4	18.5	15.6	41.6	37.	19.8	16.8	31.4	28.	40.1	33.4
5	18.8	19.7	45.8	44.2	17.7	16.9	31.5	30.2	45.2	41.8
6	18.7	18.0	44.8	44.1	20.7	20.	32.8	32.6	47.8	41.5
7	18.5	18.1	43.6	41.1	21.7	20.5	31.5	30.1	45.0	41.1
8	17.4	18.1	43.5	41.3	20.4	18.2	31.3	29.7	49.8	44.6
9	19.3	18.4	45.	45.3	21.	17.	34.6	31.9	47.5	44.8
10	21.1	19.8	47.	44.	22.7	20.5	34.1	31.7	48.6	43.4
11	16.8	15.6	42.5	38.1	19.5	21.6	30.2	28.7	42.3	40.4
12	17.3	16.0	41.8	38.2	19.8	18.	29.8	29.2	42.2	39.
13	16.9	18.3	45.3	42.8	19.	20.1	32.1	31.6	42.3	39.6
14	16.4	17.0	40.7	39.2	19.2	19.3	34.0	32.1	41.6	38.6
15	17.2	16.4	43.4	23.4	19.9	18.4	28.8	29.5	43.5	40.0
16	16.8	18.2	44.5	40.5	23.4	21.	34.3	33.7	42.8	40.6
17	17.6	16.1	44.8	40.8	18.5	16.5	31.2	27.8	45.0	39.2
18	17.6	15.9	44.1	38.7	20.	18.	39.8	29.4	44.3	40.7
19	18.0	16.4	44.8	38.2	20.9	19.	32.2	29.4	44.2	40.8
20	17.2	16.1	44.5	38.4	20.1	18.	32.3	30.6	44.5	40.5
21	19.8	19.4	48.	44.5	22.1	21.6	38.	36.3	49.0	44.2
22	17.1	16.1	42.	38.5	20.	18.	30.5	29.	44.2	40.5
23	16.6	16.8	42.6	40.0	20.	18.	28.8	28.4	41.6	39.2
24	18.5	18.9	46.5	41.5	19.6	20.	32.4	31.9	44.8	39.4
25	17.5	17.8	32.7	37.9	18.4	18.4	32.1	31.1	42.1	37.3
26	17.6	16.2	44.	39.1	20.	18.	28.	29.1	43.7	39.5
27	17.0	16.5	48.8	43.8	20.9	20.3	35.	32.8	43.7	40.2
28	17.4	16.2	42.6	39.	20.4	18.2	30.6	29.4	43.9	40.2
29	18.8	16.2	42.7	38.	20.5	18.	31.1	29.3	42.5	39.8
30	17.1	16.6	44.1	31.	20.6	18.8	35.9	32.3	48.3	42.5
31	18.7	17.8	46.6	41.4	19.3	18.1	34.7	31.8	45.5	41.8
32	17.7	18.7	41.8	42.3	19.4	20.6	30.8	32.	39.8	38.4
33	18.2	19.8	43.1	40.8	23.7	20.8	34.	30.1	47.1	42.7
34	17.1	18.6	41.1	39.1	18.4	17.5	34.7	31.8	48.5	45.4
35	19.4	16.9	42.3	40.8	19.6	19.	36.9	33.3	46.6	43.6
36	16.2	16.4	42.1	37.5	17.7	16.3	31.5	29.4	44.4	40.3
37	18.3	18.3	42.8	40.5	20.5	19.	32.9	29.3	52.0	46.8
38	19.2	19.7	42.3	42.	21.4	20.3	34.9	32.9	43.7	40.9
39	17.8	15.8	41.5	35.2	19.	16.8	32.3	28.8	41.6	39.0
40	18.0	16.8	41.7	34.6	19.	17.5	33.2	29.6	42.7	38.6
Total	712.8	693.0	1736.0	1537.9	804.1	749.1	1282.2	1222.9	1783.0	1633.4
Average	17.82	17.3	43.4	38.4	20.1	18.73	32.05	30.56	44.57	40.8

TABLE XXV. SUMMARY TABLE XXIV. PAGES.

On this page, in order that they mav become more easily accessible to those who may desire to use them, the results in the preceding table are presented in a more convenient form than was possible in that table.

For a more complete presentation of the basic data in which the results on this page are included see next table in order.

1. *Grain: Time required, wages per hour.*

Items.	Hours. 400 acres	Hours. 1 acre.	Wages per hour. Cts.
Plowing	1811.3	4.628	24.15
Harrowing, etc., seeding	979.8	2.449	23.98
Cutting	385.7	.964	27.01
Shocking, one man	462.1	1.155	11.85
Stacking, two men and team	490.1	1.225	34.79

2. *Corn: Time required, wages per hour.*

Plowing	1795.3	4.488	24.70
Harrowing, etc.	759.5	1.899	24.49
Planting	463.4	1.158	18.24
Cultivating	2179.5	5.449	22.70
Cutting	2112.1	5.280	13.16

3. *Quantities of seed used.*

	Bushels 400 acres.	Bushels one acre.
Wheat	693.5	1.73
Oats	1009.8	2.52
Rye	658.2	1.64
Barley	840.3	2.10

4. *Value of land and machinery used.*

	Value 400 acres.	Value one acre
Land	$20,920.00	$52.30
Machinery	1,856.00	4.64

5. *Yield 1896 and average for 5 years.*

	Bushels 400 acres, 1896.	Bushels one acre, 1896.	Bushels 400 acres, 5 years.	Bushels one acre 5 years.
Wheat	712.8	17.8	693.0	17.3
Oats	1736.0	43.4	1537.9	38.4
Rye	804.1	20.1	749.1	18.7
Barley	1282.2	32.1	1222.9	30.6
Corn	1783.0	44.6	1633.4	40.8

In the last preceding two tables is presented the greater part of the data upon which the "Cost of Production" and "Value of Product," as shown in Tables 27, 31, 35, 39, and 43 have been computed.

Table XXIV. contains 40 presentations, each including 10 reports, showing the time required and wages per hour for man and team or single man, as the case may be, for Plowing, Harrowing and Seeding, Cutting, Shocking, Stacking 10 acres of grain, and for Plowing, Harrowing, Planting, Cultivating, Cutting 10 acres of corn; the quantity of seed used per acre in each case of Wheat, Oats, Rye, Barley; the value per acre of land and machinery used; the yield per acre in 1896; and the average yield for five years of Wheat, Oats, Rye, Barley and Corn.

Table XXV shows the totals and averages in Table XXIV. This table is divided into five sub-tables. In 1 and 2 of these sub-tables under "Time required and wages per hour" are shown the total number of hours required for each class of labor on 400 acres, the average time per acre and average wage per hour; in 3, under "Quantities of seed used" are shown the quantity use for 400 acres and the average per acre of each crop; in 4, under "Value of land and machinery used" are shown the total value of 400 acres and the average value per acre in each case of the land and machinery used; in 5, under "Yield 1896, and average yield" are shown the total yield of 400 acres, 1896, and the average yield per acre, the average yearly yield on 400 acres during 5 years and the average per acre of each of the five crops.

As already alluded to, these two tables do not include all the data collected or used as a basis for the Cost of Production and Value of Product, as shown in the tables referred to. Another table was therefore compiled, which, while it presents only averages and totals, covers all points inquired about, and will be found both complete and reliable. This table is divided into 7 sub-tables and is presented on the next two pages.

TABLE XXVI.

FACTORS OF COST AND VALUE IN PRODUCING GRAIN.

On these two pages are presented in seven sections the data from which the "Cost of Production" and "Value of Products" as shown in Tables 27-46 inclusive have been computed. This data was obtained directly from farmers. In Section 1 is shown the rate of wages paid per day and month for labor and team work with or without board included. In Section 2 is shown the average time needed per acre for properly performing the different parts of the work involved from the time the soil is prepared for seed until the time of threshing. Section 3 shows the data upon which the expenses of threshing, marketing and seed are based. Section 4 shows the number of acres under cultivation, and not under cultivation, respectively, owned or controlled by the farmers reporting, and the value per acre in each case and the average value

1. *Wages paid per day and month.*

Items.	With Board.		Without Board.	
	Day.	Night.	Day.	Month.
Man and team of two horses	$1.85	$42.00	$2.40	$52.00
Labor, men	.90	17.50	1.18	26.20
Team of two horses	.95	24.60	1.22	25.80

2. *Time needed for doing the different parts of work.*

Items.	Acres per day	Hours per acre.	Items.	Acres per day	Hours per acre.
Plowing	2.21	4.53	Planting corn, one man, hand	4.00	2.50
Harrowing for grain	6.25	1.60	Cultivating corn, one man and team	1.83	5.45
Harrowing for corn	5.36	1.90	Cutting corn, two men and team	5.55	1.80
Seeding grain	11.63	.86	Cutting corn one man, hand.	1.29	7.80
Cutting for grain	10.46	.96	Cutting corn, average table	1.89	6.28
Stacking grain two man	8.70	1.16	Husking corn, one man, hand	.88	11.36
Stacking grain, two men	8.13	1.23			
Planting corn, one man and team	8.62	1.16			

3. *Threshing marketing and seed.*

Items.	Threshing.			Marketing.			Seed per Acre.		
	Bushels per day.	Number of men employ'd	Cost per bushel for machine.	Miles of hauling.	Loads day.	Bush. per load.	Bushels.	Price.	
								1896.	5 y'rs.
								Cts.	Cts.
Wheat	1000	14	1.	6.5	2	42	1.7	75	70
Corn	Shelling	....	1.3	6	2	42	.2	35	40
Oats	1850	14	.90	6	2	75	2.5	30	35
Rye	1000	14	1.	6	2	45	1.6	45	50
Barley	1550	14	1.	6	2	45	2.1	40	45

per acre. Section 5 shows the total value of the machinery used and the value of the same to each acre under cultivation, and the total value of the horses used and the average to each acre owned or controlled. Section 6 shows the data upon which taxes, the cost of maintaining horses and the cost of fertilling are based.

In Section 7 is presented the data from which the "Value of Products" was arrived at or the yield in bushels per acre and the prices per bushel, also the value per acre of the accompanying straw or stalk. As regards the value of straw and stalks two estimates are given: one giving their value as compared with the commercial value of other products used for the same purpose; the other giving the value reported by the farmers.

For details of the greater part of the averages shown here see the preceding table.

4. *Acres in farms, value per acre.*

Items.	Acres under cultivation.	Acres not under cultivation.	Total acres, average price.
Acres controlled by the 400 farmers reporting	36,236	24,138	60,374
Value per acre, average value	$52.30	$27.00	$42.00

5. *Value of machinery and horses used.*

Items.	Value per acre.	Total value.
Machinery: Per acre under cultivation, total	$4.65	$168,497
Horses: Per acre controlled, total	1.46	88,128

6. *Other items or factors of expense.*

Items.	Per acre.	Total.
Taxes: Per acre controlled, total paid	$0.26	$15.695
Maintenance of horses: Per acre controlled, total cost	.92	55.298
Manures: Loads per acre, total loads	2.25	81.531
Manures: Bought, price per load $0.75. Labor, cost per load		.32
Horses: Number used, 1530. Average value		57.60

7. *Yield per acre, price per bushel, value per acre of straw.*

Items.	Yield Price, 1896.		Yield Price, Average 5 Years.		Value of Straw.	
	Bushels.	Cents.	Bushels.	Cents.	Estimated in feed and fert. stuffs.	Reported by farmers.
Wheat	17.8	64.80	17.3	61.17	$2.20	$1.40
Corn	44.6	23.95	40.8	34.70	6.07	3.00
Oats	43.4	16.85	38.4	25.44	4.64	2.50
Rye	20.0	33.30	18.5	46.20	3.10	2.00
Barley	32.5	28.80	30.6	44.50	3.84	1.50

WHEAT.—TABLE XXVII.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

Office No.	Plowing.				Harrowing and Seeding.				Cutting.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years	Acre 1896	Bush 1896	Acre 5 years	Bush 5 years
	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.
1	8.72	4.78	8.72	5.02	5.56	3.04	6.56	3.19	2.35	1.29	2.35	1.35
2	10.74	6.28	10.74	6.67	5.68	3.33	5.68	3.53	2.42	1.42	2.42	1.50
3	10.41	5.83	10.41	6.19	6.54	3.66	6.54	3.88	2.47	1.33	2.47	1.48
4	11.84	6.40	11.84	6.85	6.96	3.74	6.96	4.03	2.62	1.42	2.62	1.61
5	11.01	5.54	11.01	5.59	5.80	2.92	5.80	2.95	2.37	1.20	2.37	1.20
6	11.28	6.03	11.28	6.27	5.81	3.12	6.81	3.23	2.80	1.49	2.80	1.56
7	9.51	5.14	9.61	5.17	5.44	2.94	6.44	2.95	2.28	1.23	2.28	1.24
8	10.75	6.18	10.75	5.94	7.06	4.05	7.06	3.90	2.72	1.56	2.72	1.60
9	10.21	5.28	10.21	5.55	5.95	3.08	5.95	3.23	2.66	1.37	2.66	1.45
10	9.67	4.59	9.67	4.86	5.64	2.67	5.64	2.83	2.55	1.21	2.55	1.28
11	10.56	6.28	10.56	6.77	5.32	3.16	6.32	3.41	2.70	1.61	2.70	1.73
12	11.25	6.50	11.25	7.03	5.58	3.28	5.58	3.49	2.53	1.46	2.53	1.58
13	10.20	5.64	10.20	5.57	6.40	3.53	6.40	3.49	2.75	1.53	2.75	1.60
14	10.32	6.29	10.32	6.08	5.40	3.29	5.40	3.18	2.29	1.39	2.29	1.34
15	11.05	6.42	11.05	6.73	5.85	3.40	6.85	3.56	2.77	1.61	2.77	1.69
16	9.67	5.76	9.67	5.31	4.96	2.95	4.96	2.72	2.29	1.36	2.29	1.26
17	13.14	7.46	13.14	8.16	6.20	3.53	6.20	3.86	2.99	1.69	2.99	1.86
18	10.79	6.13	10.79	6.79	6.72	3.81	6.72	4.23	2.42	1.37	2.42	1.53
19	11.85	6.59	11.85	7.22	6.17	3.44	6.17	3.76	2.80	1.56	2.80	1.71
20	11.36	6.60	11.36	7.06	5.85	3.40	5.85	3.64	2.77	1.62	2.77	1.72
21	11.44	6.06	11.44	5.89	5.04	2.66	5.04	2.61	2.57	1.36	2.57	1.33
22	11.85	6.94	11.85	7.36	6.30	3.69	6.30	3.92	2.65	1.55	2.65	1,64
23	11.90	7.17	11.90	7.09	6.40	3.86	6.40	3.82	2.62	1.58	2.62	1.56
24	10.46	5.65	10.46	5.53	4.99	2.69	4.99	2.64	2.39	1.30	2.39	1.26
25	9.98	5.74	9.98	5.61	5.13	2.96	5.13	2.90	2.59	1.49	2.59	1.46
26	10.71	6.09	10.71	6.61	5.75	3.28	5.75	3.54	2.52	1.44	2.52	1.56
27	10.10	5.95	10.10	6.05	5.51	3.24	5.51	3.29	2.65	1.50	2.55	1.53
28	11.02	6.33	11.02	6.81	6.37	3.67	6.37	3.94	2.72	1.56	2.72	1.69
29	10.12	6.38	10.12	6.25	6.03	3.20	6.03	3.72	2.77	1.47	2.77	1.71
30	11.28	6.59	11.28	6.80	6.34	3.71	6.34	3.82	2.49	1.46	2.49	1.50
31	11.33	6.06	11.33	6.37	6.38	3.41	6.38	3.60	2.50	1.34	2.50	1.40
32	10.32	5.84	10.32	5.51	5.21	2.94	6.21	2.78	2.67	1.51	2.67	1.42
33	10.87	5.97	10.87	5.63	6.50	3.56	6.50	3.36	2.75	..51	2.75	1.42
34	11.97	7.00	11.97	6.44	5.85	3.43	5.85	3.14	2.66	1.55	2.66	1.43
35	11.42	5.89	11.42	6.16	5.60	2.89	6.60	3.02	2.84	1.46	2.84	1.53
36	11.16	6.88	11.16	6.81	6.20	3.83	6.20	3.78	2.80	1.72	2.80	1.70
37	10.32	5.77	10.32	5.64	5.13	2.87	5.13	2.79	2.57	1.44	2.57	1.40
38	10.81	5.63	10.81	5.49	5.40	2.82	6.40	2.73	2.64	1.37	2.64	1.34
39	10.24	5.92	10.24	6.48	6.86	3.96	6.86	4.34	2.95	1.71	2.95	1.87
40	9.26	5.18	9.26	5.47	5.49	3.07	5.49	3.24	2.34	1.32	2.34	1.37
Total	430.89	241.76	430.89	248.83	235.37	132.08	235.37	136.04	104.14	58.36	104.14	60.11
Average	1.0772	6.044	1.0772	6.221	.5884	3.302	.5884	3.401	.2603	1.459	.2603	1.503

WHEAT.—TABLE XXVII, continued.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

Office No.	Fertilizing.				Seed.				Shocking and Stacking.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	25.30	13.90	25.30	14.54	11.61	6.38	11.05	6.35	5.58	3.06	5.58	3.20
2	25.00	14.63	25.00	15.63	11.20	6.55	10.85	6.74	5.36	3.14	5.36	3.33
3	23.00	12.85	23.00	13.69	10.91	6.10	10.39	6.19	4.56	2.55	4.56	2.72
4	25.00	13.52	25.00	14.45	9.60	5.19	9.22	5.33	6.13	3.32	6.13	3.64
5	25.00	12.[illegible]	25.00	12.69	11.11	5.58	10.28	5.22	5.57	2.80	5.57	2.82
6	25.00	13.38	25.00	13.89	11.16	5.98	10.03	5.56	6.56	3.61	6.56	3.65
7	26.00	14.06	26.00	14.13	12.08	6.53	11.21	6.09	4.71	2.54	4.71	[illegible].56
8	25.55	14.68	25.55	14.12	10.93	6.28	10.45	5.77	5.86	3.36	5.86	3.24
9	26.70	13.83	26.70	14.51	10.03	5.19	9.66	5.25	6.51	3.37	6.51	3.54
10	26.20	12.41	26.20	13.17	10.40	4.93	9.52	4.78	5.45	2.58	5.45	2.74
11	25.00	14.88	25.00	16.02	8.91	5.30	8.37	5.37	6.09	3.63	6.09	3.90
12	25.00	14.46	25.00	15.62	10.24	5.91	9.92	6.20	5.50	3.17	5.50	3.43
13	25.00	13.81	25.00	13.67	11.52	6.36	10.92	5.96	6.25	3.45	6.25	3.42
14	25.00	15.25	25.00	14.70	10.59	6.46	9.76	5.74	5.35	3.27	5.35	3.15
15	25.00	14.54	[illegible].00	15.24	11.42	6.64	11.74	7.15	6.48	3.76	6.48	3.95
16	25.00	14.87	25.00	13.73	10.48	6.24	9.92	5.45	4.28	2.55	4.28	2.36
17	25.00	14.20	25.00	15.53	11.01	6.26	10.40	6.45	7.08	[illegible].02	7.08	4.39
18	25.00	14.20	25.00	15.73	10.96	6.26	10.42	6.55	6.10	3.47	6.10	3.83
19	25.00	13.89	25.00	[illegible].24	11.01	6.11	10.85	6.62	7.40	4.11	7.40	4.52
20	25.00	14.53	[illegible].00	15.53	10.29	5.98	9.92	6.16	6.06	3.53	6.06	3.76
21	25.00	13.23	25.00	12.89	10.94	5.79	11.22	5.78	5.38	2.84	5.38	2.78
22	25.00	14.62	25.00	15.53	10.33	6.04	9.92	6.16	6.63	3.88	6.63	4.12
23	25.00	15.06	25.00	[illegible].88	12.16	7.32	11.78	7.01	6.79	4.10	6.79	4.04
24	25.00	13.51	[illegible].00	13.23	11.53	6.23	10.34	5.47	5.78	3.12	5.78	3.06
25	25.00	14.37	25.00	14.05	8.97	5.17	11.47	6.44	6.31	3.62	6.31	3.54
26	25.00	14.21	25.00	15.43	11.52	6.49	11.16	6.89	5.27	3.00	5.27	3.25
27	25.00	14.71	25.00	14.97	13.28	7.81	11.94	7.15	5.76	3.38	5.76	3.45
28	25.00	14.36	25.00	15.43	10.88	6.25	10.54	6.50	6.62	3.80	6.62	4.08
29	25.00	13.29	25.00	15.43	12.00	6.38	11.62	7.17	6.74	3.59	6.74	4.16
30	25.86	15.12	25.85	15.56	12.29	7.19	11.58	6.98	5.38	3.15	5.38	3.24
31	23.20	12.41	23.20	13.03	12.40	6.63	12.20	6.85	6.08	3.25	6.08	3.41
32	25.25	14.27	25.25	13.61	11.84	6.69	10.80	5.77	5.66	3.19	5.66	3.02
33	25.00	13.73	25.00	12.95	12.86	7.06	12.00	6.21	5.84	3.21	5.84	3.02
34	27.35	16.99	27.35	14.70	11.19	6.55	10.60	5.65	5.40	3.15	5.40	2.90
35	25.00	12.89	25.00	13.51	12.94	6.67	11.96	6.46	7.12	3.67	7.12	3.84
36	26.95	16.63	26.95	16.44	10.88	6.71	10.58	6.45	6.10	3.76	6.10	3.72
37	25.30	14.13	25.30	13.82	11.65	6.51	11.08	6.06	5.91	3.30	5.91	3.23
38	25.25	13.15	25.25	12.82	12.09	6.29	10.26	5.20	6.45	3.36	6.45	3.28
39	27.80	16.07	27.80	17.60	11.04	6.39	10.03	6.35	6.20	3.68	6.20	3.92
40	25.70	14.36	25.70	15.20	10.95	6.17	10.40	6.14	5.85	3.27	5.85	3.46
Total	1010.4	566.56	1010.4	582.81	447.20	250.57	426.36	245.66	238.15	133.41	238.15	137.57
Average	2.5260	14.164	2.5260	14.570	1.1180	6.264	1.0659	6.141	.5954	3.335	.5954	3.439

WHEAT.—TABLE XXVII, continued.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

OFFICE No.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1..........	5.46	3.00	5.22	3.00	4.91	2.70	4.69	2.70	30.60	16.[illegible]1	30.60	17.58
2..........	4.10	2.40	3.86	2.40	4.44	2.60	4.18	2.60	26.10	15.25	26.10	16.21
3..........	4.65	2.60	4.37	2.60	5.55	3.10	5.22	3.10	26.70	14.92	26.70	15.89
4..........	4.99	2.70	4.67	2.70	5.36	2.90	5.01	2.90	31.30	16.92	31.30	18.09
5..........	4.64	2.34	4.60	2.34	4.98	2.50	4.92	2.50	37.20	18.69	37.20	18.88
6..........	4.48	2.40	4.32	2.40	3.92	2.10	3.78	2.10	31.08	16.63	31.08	17.28
7..........	4.62	2.50	4.60	2.50	4.81	2.60	4.78	2.60	30.60	16.54	30.60	16.63
8..........	4.35	2.50	4.52	2.60	5.22	3.00	5.43	3.00	33.00	18.96	33.00	18.23
9..........	5.11	2.65	4.88	2.65	5.11	2.[illegible]	4.88	2.65	33.60	17.41	33.60	18.26
10..........	5.27	2.50	4.97	2.50	5.48	2.60	5.17	2.60	33.30	15.78	33.30	16.73
11..........	4.20	2.50	3.90	2.60	4.81	2.86	4.51	2.89	29.40	17.60	29.40	18.85
12..........	4.16	2.40	3.8[illegible]	2.40	4.84	2.80	4.28	2.80	27.30	15.77	27.30	17.06
13..........	5.06	2.80	5.12	2.80	5.61	3.10	5.67	3.10	33.90	18.73	33.90	18.54
14..........	4.76	2.90	4.93	2.90	4.92	3.00	5.10	3.00	28.08	17.12	28.08	16.61
15..........	4.64	2.70	4.43	2.70	4.12	2.39	3.94	2.40	30.66	17.82	30.66	18.71
16..........	4.36	2.60	4.73	2.60	4.36	2.60	4.73	2.60	25.80	15.36	25.80	14.11
17..........	4.40	2.50	4.02	2.50	5.45	3.10	4.99	3.10	30.90	17.56	30.90	19.19
18..........	4.22	2.39	3.81	2.39	6.33	3.69	5.72	3.69	33.30	18.92	33.30	20.93
19..........	4.86	2.70	4.42	2.70	5.40	3.00	4.92	3.00	27.60	15.33	27.60	16.83
20..........	4.13	2.40	3.86	2.40	5.84	3.40	5.47	3.40	33.00	19.1[illegible]	33.00	20.49
21..........	4.72	2.50	4.85	2.50	4.34	2.30	4.46	2.30	31.02	16.42	31.02	15.99
22..........	3.93	2.29	3.70	2.29	4.61	2.69	4.34	2.69	32.70	19.12	32.70	20.32
23..........	3.82	2.30	3.86	2.30	5.31	3.20	5.88	3.20	24.48	14.76	24.48	14.53
24..........	5.36	2.90	5.48	2.90	4.99	2.70	5.10	2.70	36.90	19.95	36.90	19.53
25..........	5.04	2.89	5.16	2.89	5.39	3.09	5.51	3.09	22.98	13.20	22.98	12.91
26..........	3.87	2.20	3.56	2.20	5.46	3.10	5.02	3.10	31.50	17.90	31.50	19.44
27..........	4.25	2.50	4.17	2.60	3.57	2.10	3.50	2.10	35.28	20.75	35.28	21.14
28..........	4.35	2.50	4.05	2.60	6.26	3.60	5.83	3.60	31.50	18.10	31.50	19.44
29..........	4.70	2.60	4.05	2.50	6.20	3.80	5.34	3.30	30.90	16.43	30.90	19.07
30..........	4.27	2.50	4.15	2.50	5.47	3.20	5.31	3.20	32.10	18.77	32.10	19.34
31..........	5.23	2.80	4.96	2.80	5.05	2.70	4.80	2.70	30.30	16.22	30.30	17.02
32..........	4.96	2.80	5.23	2.80	6.02	3.40	6.35	3.40	29.34	16.58	29.34	15.64
33..........	5.09	2.80	5.40	2.80	5.82	3.20	6.17	3.20	31.50	17.33	31.50	16.36
34..........	4.19	2.45	4.55	2.45	4.36	2.55	4.74	2.55	35.40	20.70	35.40	19.04
35..........	4.46	2.30	4.25	2.30	5.24	2.70	4.99	2.70	33.90	17.47	33.90	18.32
36..........	4.21	2.60	4.26	2.60	4.54	2.80	4.59	2.80	36.60	22.59	36.60	22.31
37..........	4.81	2.70	4.94	2.70	4.12	2.30	4.20	2.30	31.50	17.59	31.50	17.21
38..........	5.38	2.80	5.61	2.80	6.14	3.19	6.30	3.19	34.80	18.13	34.80	17.68
39..........	3.98	2.30	3.63	2.30	4.67	2.70	4.26	2.70	26.10	15.08	26.10	16.52
40..........	4.83	2.70	4.56	2.70	5.01	2.80	4.63	2.80	30.90	17.26	30.90	18.28
Total..	183.89	102.81	179.39	102.81	204.03	114.21	198.21	114.25	1243.12	695.54	1243.12	715.09
Average..	.4597	2.570	.4485	2.570	.5101	2.855	.4955	2.856	3.108	17.388	3.108	17.877

WHEAT — TABLE. XXVII, continued.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	6.81	3.[illegible]	6.81	3.91	2.50	1.37	2.50	1.44	5.00	2.74	5.00	2.88
2	3.67	2.15	3.67	2.28	2.50	1.45	2.50	1.55	5.00	2.91	5.00	3.10
3	6.85	3.83	6.85	4.08	2.50	1.39	2.50	1.49	5.00	2.79	5.00	2.97
4	4.90	2.65	4.90	2.83	2.50	1.35	2.50	1.44	5.00	2.70	5.00	2.88
5	5.20	2.61	5.20	2.65	2.50	1.25	2.50	1.26	5.00	2.50	5.00	2.53
6	5.00	2.66	5.00	2.77	2.50	1.33	2.50	1.38	5.00	2.62	5.00	2.77
7	6.83	3.69	6.83	3.71	2.50	1.35	2.50	1.36	5.00	2.70	5.00	2.71
8	4.00	2.30	4.00	2.21	2.50	1.44	2.50	1.38	5.00	2.88	5.00	2.76
9	4.65	2.40	4.65	2.52	2.50	1.30	2.50	1.36	5.00	2.60	5.00	2.72
10	4.65	2.20	4.65	2.34	2.50	1.18	2.50	1.25	5.00	2.37	5.00	2.50
11	4.40	2.62	4.40	2.82	2.50	1.49	2.50	1.60	5.00	2.98	5.00	3.20
12	4.00	2.31	4.00	2.50	2.50	1.44	2.50	1.57	5.00	2.88	5.00	3.14
13	4.50	2.49	4.50	2.46	2.50	1.38	2.50	1.36	5.00	2.76	5.00	2.72
14	4.00	2.44	4.00	2.35	2.50	1.52	2.50	1.47	5.00	3.04	5.00	2.95
15	2.70	1.57	2.70	1.64	2.50	1.46	2.50	1.53	5.00	2.92	5.00	3.06
16	4.48	2.66	4.48	2.46	2.50	1.49	2.50	1.37	5.00	2.98	5.00	2.74
17	5.60	3.18	5.60	3.48	2.50	1.42	2.50	1.55	5.00	2.84	5.00	3.11
18	3.96	2.24	3.96	2.49	2.50	1.42	2.50	1.57	5.00	2.85	5.00	3.15
19	4.50	2.50	4.50	2.74	2.50	1.38	2.50	1.52	5.00	2.77	5.00	3.04
20	3.50	2.03	3.50	2.18	2.50	1.45	2.50	1.55	5.00	2.90	5.00	3.10
21	3.30	1.74	3.30	1.70	2.50	1.32	2.50	1.28	5.00	2.64	5.00	2.56
22	4.50	2.62	4.50	2.79	2.50	1.46	2.50	1.55	5.00	2.93	5.00	3.11
23	4.60	2.77	4.60	2.73	2.50	1.50	2.50	1.48	5.00	3.00	5.00	2.96
24	4.73	2.66	4.73	2.50	2.50	1.35	2.50	1.32	5.00	2.70	5.00	2.64
25	3.85	2.21	3.85	2.16	2.50	1.43	2.50	1.40	5.00	2.87	5.00	2.81
26	4.00	2.28	4.00	2.48	2.50	1.42	2.50	1.64	5.00	2.85	5.00	3.09
27	5.37	3.15	5.37	3.21	2.50	1.47	2.50	1.49	5.00	2.95	5.00	2.99
28	4.00	2.29	4.00	2.46	2.50	1.44	2.50	1.54	5.00	2.88	5.00	3.09
29	5.75	3.06	5.75	3.55	2.50	1.33	2.50	1.54	5.00	2.67	5.00	3.09
30	3.60	2.10	3.60	2.17	2.50	1.46	2.50	1.50	5.00	2.92	5.00	3.01
31	6.63	3.54	6.63	3.72	2.50	1.33	2.50	1.40	5.00	2.66	5.00	2.80
32	4.00	2.25	4.00	2.14	2.50	1.41	2.50	1.33	5.00	2.43	5.00	2.66
33	4.18	2.30	4.18	2.16	2.50	1.37	2.50	1.29	5.00	2.75	5.00	2.59
34	5.72	3.34	5.72	2.00	2.50	1.46	2.50	1.34	5.00	2.93	5.00	2.69
35	5.50	2.83	5.50	2.97	2.50	1.29	2.50	1.35	5.00	2.58	5.00	2.70
36	5.13	3.16	5.13	3.13	2.50	1.56	2.50	1.52	5.00	3.12	5.00	3.05
37	4.87	2.73	4.87	2.66	2.50	1.39	2.50	1.37	5.00	2.78	5.00	2.74
38	3.74	1.96	3.74	1.89	2.50	1.30	2.50	1.27	5.00	2.60	5.00	2.54
39	3.67	2.07	3.67	2.27	2.50	1.44	2.50	1.57	5.00	2.89	5.00	3.15
40	4.60	2.51	4.60	2.72	2.50	1.39	2.50	1.48	5.00	2.78	5.00	2.96
Total	185.84	103.74	185.84	105.83	100.00	55.98	100.00	57.56	200.00	111.66	200.00	115.26
Average	.4646	2.593	.4646	2.646	.250	1.374	.250	1.436	.500	2.791	.500	2.881

WHEAT.—TABLE XXVII, continued.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

OFFICE NUMBER.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1......	114.40	62.81	113.38	65.16	25.40	13.96	25.40	14.59	117.39	64.5	107.03	61.4
2......	106.21	62.11	105.36	65.44	20.00	11.63	20.00	11.42	109.44	64.	99.82	62.
3......	109.14	60.95	108.01	64.28	20.00	11.17	20.00	11.90	114.91	64.2	101.97	60.7
4......	116.20	62.81	115.15	66.55	22.00	11.88	22.00	12.71	118.40	64.	106.39	61.5
5......	120.38	60.49	119.45	60.63	24.50	12.3[illegible]	24.50	12.43	129.35	65.	122.33	62.1
6......	114.59	61.25	113.16	62.86	21.00	11.23	21.00	11.66	122.85	65.7	106.20	59.
7......	114.38	61.82	113.46	61.65	24.95	13.45	24.95	13.56	122.84	66.4	111.34	61.6
8......	116.94	67.19	116.84	64.55	22.60	12.99	22.60	12.48	111.88	64.3	111.31	61.5
9......	118.03	61.13	117.20	63.69	22.60	11.66	22.50	12.23	125.47	64.7	114.63	62.3
10......	116.11	55.02	114.62	57.58	23.65	11.21	23.65	11.88	137.15	65.	118.40	59.5
11......	108.89	64.81	107.75	69.06	20.00	11.90	20.00	12.82	110.88	66.	96.72	62.
12......	107.89	62.38	106.70	66.82	20.00	11.36	20.00	12.19	110.7[illegible]	64.	99.20	62.
13......	118.69	65.58	118.21	64.59	21.00	11.60	21.00	11.47	115.84	64.	111.08	60.7
14......	108.20	65.97	107.73	63.37	20.00	12.19	20.00	11.76	108.08	65.9	103.70	61.
15......	112.19	65.23	112.12	68.36	20.00	1[illegible].04	20.00	12.19	112.[illegible]	65.3	100.69	61.4
16......	103.18	61.42	103.36	56.71	23.00	13.68	23.00	12.63	110.04	65.5	112.84	62.
17......	119.27	67.76	117.82	73.18	20.00	11.36	20.00	12.19	114.04	64.8	98.53	61.2
18......	117.30	66.65	115.74	72.78	20.00	11.37	20.00	12.57	113.52	64.5	97.46	61.3
19......	114.09	63.38	113.01	68.90	21.00	11.67	21.00	12.80	113.22	62.9	101.68	62.
20......	115.30	67.02	114.29	70.99	21.00	12.21	21.00	13.04	109.56	63.7	99.82	62.
21......	111.25	58.86	111.78	57.61	24.00	12.69	24.00	12.37	127.61	64.4	119.31	61.5
22......	116.00	6[illegible].83	115.09	71.48	20.00	11.69	20.00	12.42	110.46	64.6	99.82	62.
23......	110.58	66.61	110.31	65.60	20.00	12.05	20.00	11.90	106.24	64.	104.16	62.
24......	119.63	64.66	118.67	62.78	25.97	14.14	25.97	13.74	126.54	68.4	115.01	60.8
25......	102.74	59.04	105.48	59.26	20.00	11.49	20.00	11.23	111.14	63.3	106.62	59.9
26......	113.10	64.26	111.99	69.13	20.00	11.36	20.00	12.34	112.64	64.	100.44	62.
27......	118.17	69.51	116.68	69.87	24.07	14.15	24.07	14.41	112.88	66.4	99.69	59.7
28......	116.22	66.78	115.15	71.08	20.00	11.49	20.00	12.34	111.36	64.	100.44	62.
29......	117.71	62.60	115.82	71.49	20.00	10.64	20.00	12.34	[illegible].32	64.	100.44	62.
30......	116.57	68.17	115.58	69.62	22.15	12.95	22.15	13.34	110.62	64.7	101.09	60.9
31......	116.[illegible]	62.35	115.88	65.10	20.95	11.20	20.95	11.77	115.94	62.	108.58	61.
32......	112.77	63.31	112.33	60.08	24.40	13.67	24.40	13.04	116.46	65.8	112.20	60.
33......	117.91	64.79	117.71	60.9[illegible]	23.00	12.63	23.00	11.91	117.03	64.3	116.5[illegible]	60.
34......	121.69	71.10	121.74	64.37	27.10	15.85	27.10	14.57	108.41	63.4	112.71	60.6
35......	121.52	62.64	120.08	64.86	20.70	10.66	20.70	11.18	125.52	64.7	100.63	59.8
36......	122.07	75.36	121.87	74.31	22.10	13.65	22.10	13.48	103.68	64.	102.83	62.7
37......	113.68	63.51	113.32	61.92	24.65	13.77	24.65	13.47	105.81	64.7	112.73	61.6
38......	120.20	62.60	118.66	60.23	24.12	12.56	24.12	12.24	129.02	67.2	112.49	57.1
39......	110.91	64.11	109.14	69.07	20.00	11.56	20.00	12.66	119.37	69.	99.06	62.7
40......	112.43	62.81	111.23	65.82	23.15	12.93	23.15	13.70	115.27	64.	103.43	61.2
Total	4583.03	2566.68	4551.87	2621.82	878.96	491.23	878.96	503.52	4634.21	2591.3	4248.62	2446.7
Av'ge	11.457	64.16	11.379	65.54	2.197	12.28	2.197	12.58	11.585	6.478	10.622	6.117

WHEAT.—TABLE XXVII, continued.

Cost of production and value of products of 400 acres of wheat in 10 acre lots.

OFFICE NO.	TOTAL VALUE OF PRODUCTS RAISED.				PROFIT.			
	Total value per acre and bushel.				*Profit per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	142.79	78.46	132.43	75.99	2.839	15.65	1.905	10.83
2	129.44	75.63	119.82	73.43	2.323	13.52	1.446	7.99
3	134.91	75.37	121.97	72.60	2.677	14.42	1.396	8.32
4	140.40	75.88	128.39	74.21	2.420	13.07	1.324	7.66
5	153.85	77.31	146.83	74.53	3.347	16.82	2.738	13.90
6	143.85	76.93	127.20	70.66	2.926	15.68	1.404	7.80
7	147.79	79.88	136.29	75.16	3.341	18.06	2.283	13.51
8	134.48	77.29	133.9[illegible]	73.98	1.754	10.10	1.707	9.43
9	147.97	76.36	137.13	74.53	2.994	15.23	1.993	10.84
10	160.80	76.21	142.05	71.38	4.469	21.19	2.745	13.80
11	130.88	77.90	116.72	74.82	2.199	13.09	.897	5.76
12	130.46	75.56	119.20	74.50	2.283	13.18	1.250	7.68
13	136.84	75.60	132.08	72.17	1.815	10.02	1.387	7.58
14	128.08	78.09	123.70	72.76	1.988	12.12	1.597	9.39
15	132.31	76.34	120.69	73.59	2.012	11.11	.857	5.23
16	133.04	79.18	135.84	74.63	2.986	17.76	3.248	17.92
17	134.04	76.16	118.53	73.62	1.477	8.40	.071	.44
18	133.62	75.87	117.46	73.87	1.622	9.22	.172	1.09
19	134.22	74.57	122.68	74.80	2.013	11.19	.967	5.90
20	130.56	75.91	120.82	75.04	1.626	8.89	.653	4.05
21	151.61	77.09	143.31	73.87	4.036	18.23	3.153	16.26
22	130.46	76.29	119.82	74.42	.446	8.46	.473	2.94
23	126.24	76.05	124.16	73.90	1.566	9.44	1.385	8.30
24	152.51	82.54	140.98	74.54	3.288	17.88	2.231	11.76
25	131.14	74.79	126.02	71.13	2.840	15.75	2.114	11.87
26	132.64	75.36	120.44	74.34	1.954	11.10	.845	5.21
27	136.95	80.65	123.76	74.11	1.878	11.04	.708	4.24
28	131.36	75.49	120.44	74.34	1.514	8.71	.529	3.26
29	140.32	74.64	120.44	74.34	2.261	12.04	.462	2.85
30	132.77	77.65	123.24	74.24	1.620	9.48	.766	4.62
31	136.89	73.20	129.53	72.77	2.029	10.85	1.365	7.67
32	140.86	79.47	136.60	73.04	2.809	16.16	2.427	12.96
33	140.03	76.93	138.80	71.91	2.212	12.14	2.109	10.92
34	135.51	79.25	139.81	75.17	1.392	8.15	1.807	10.80
35	146.22	75.36	121.33	70.98	2.470	12.72	.125	6.12
36	125.78	77.65	124.93	76.18	.371	2.29	.306	1.87
37	130.46	78.47	137.38	75.07	1.678	14.96	2.406	13.15
38	153.14	79.76	136.61	69.34	3.294	17.16	1.795	9.11
39	139.37	80.56	119.06	75.36	2.846	16.45	.992	6.29
40	138.42	76.98	126.58	74.90	2.599	14.12	1.535	9.08
Total	5513.17	3082.53	5127.58	2950.22	93.014	515.85	57.571	328.40
Average	13.790	77.06	12.819	73.75	2.328	12.89	1.439	8.410

TABLE XXVIII.—SUMMARY OF TABLE XXVII.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 400 acres of wheat and the average cost per acre and bushel, the total value of products of 400 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

2. *Cost of production.*

Items.	400 acres, 1896.	One acre.	Bushel	Per-cent-age.	400 acres, 5 years.	One acre.	Bushel
	$	$	Cts.		$	$	Cts.
Plowing	430.89	1.077	6.05	9.43	430.89	1.077	6.22
Harrowing and seeding	235.37	.588	3.30	5.14	235.37	.588	3.40
Cutting	104.14	.260	1.46	2.27	104.14	.260	1.50
Fertilizing	1010.40	2.526	14.16	22.07	1010.40	2.526	14.57
Seed	447.20	1.118	6.27	9.77	426.36	1.066	6.14
Shocking and stacking	238.15	.595	3.34	5.21	238.15	.595	3.44
Threshing	183.89	.460	2.57	4.00	179.39	.449	2.57
Marketing	204.03	.510	2.86	4.48	198.21	.495	2.86
Interest	1243.12	3.108	17.39	27.10	1243.12	3.108	17.88
Wear and tear	185.84	.465	2.59	4.03	185.84	.465	2.65
Taxes	100.00	.250	1.38	2.15	100.00	.250	1.43
Other expenses	200.00	.500	2.79	4.35	200.00	.500	2.88
Total	4583.03	11.457	64.16	100.00	4551.87	11.379	65.54

2. *Value of products.*

Value of grain	$4634.21	$11.59	64.78	$4248.62	$10.62	61.17
Value of straw	878.96	2.20	12.28	878.96	2.20	12.58
Total value	$5513.17	$13.79	77.06	$5127.58	$12.82	73.75

3. *Profit and loss.*

Profit	$930.14	$2.328	12.82	$575.71	$14.39	8.21
Loss	....	....	....	....	....	....
Balance profit	$930.14	$2.328	12.82	$575.71	$14.39	8.21

TABLE XXIX.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF WHEAT.

The data upon which the calculations in the tables on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value or Cost," as the case may be. In Section 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

	Items.	400 acres.	One acre.	Per bushel.
		$	$	Cts.
1	Plowing ....1,812 hours at 24 cents	434.88	1.087	6.27
2	Harrowing, etc. ....640 hours at 24 cents	153.60	.384	2.22
3	Seeding .... 344 hours at 24 cents	82.56	.206	1.20
4	Cutting ....384 hours at 24 cents	92.16	.230	1.33
5	Shocking ....464 hours at 11.8 cents	54.75	.137	.79
6	Stacking, man and team..........492 hours at 24 cents	118.08	.295	1.70
7	Stacking, extra help............492 hours at 11.8 cents	58.06	.145	.84
8	Threshing, labor................970 hours at 11.8 cents	114.46	.286	1.65
9	Threshing, machinery..........6,930 bushels at 1 cent	69.30	.173	1.00
10	Marketing.........................825 hours at 24 cents	198.00	.495	2.86
11	Seed ....680 bushels at 70 cents	476.00	1.190	6.87
12	Taxes ....400 acres at 26 cents	104.00	.260	1.50
13	Fertilizers, clover and ....1,000 loads manure	400.00	1.000	5.77
14	Other expenses....................400 acres at 50 cents	200.00	.500	2.88
15	Depreciation machinery..1,860.00 dollars at 10 per cent.	186.00	.465	2.68
	Annual investment	$2741.85	$6.855	39.56
16	Interest on machinery....1,860.00 dollars at 6 per cent	111.60	.279	1.62
17	Interest an. investment..2,741.85 dollars at 6 per cent	164.51	.411	2.38
18	Interest, land...........16,880.00 dollars at 6 per cent	1012.80	2.532	14.60
	Total	$4030.76	10.077	58.18

Total investment, $21,481.85. Average investment per acre, $53.71. Team work, 449.7 days. Labor, 642.3 days. Value per acre of land, $42.20.

2. *Value of products.*

1	6,930 bushels of wheat at 64.8 cts. av. 6 years..........	$4490.64	$11.226	64.8
2	400 acres of straw $1.20..................................	480.00	1.200	6.92
	Total	$4970.64	$12.426	71.72

3. *Surplus value.*

3	Value above costs, (profits)..............................	$939.88	$2.349	13.54

Equivalent to 4.38 per cent. on capital invested.

Part IV. Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising wheat.

An. investment	$2741.85	$6.855	39.56
Machinery ....1,860 dollars at 12 per cent	223.20	.558	3.22
Annual investment ....2,741.85 dollars at 12 per cent	329.02	.822	4.76
Total expenses less rent..........................	$3294.07	$8.235	47.54
Surplus credited to land	*1676.57	4.191	24.18
	$4970.64	$12.426	71.72

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* Capitalized at 12 per cent. equivalent to $13,971.42 or $34.93 per acre. This is $7.33 per acre below the value reported by the farmers.

TABLE XXX.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF WHEAT.

The data upon which the calculations in the table on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Product" is shown in Section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and the necessary profit at 12 per cent. on same and upon the value of machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

	Items.		400 acres.	One acre.	Bushel.
			$	$	Cts.
1	Plowing	1812 hours at 11.8 cents	213.81	.534	3.09
2	Harrowing, etc.	640 hours at 11.8 cents	75.52	.189	1.09
3	Seeding	[illegible] hours at 11.8 cents	40.59	.101	.58
4	Cutting	384 hours at 11.8 cents	45.33	.113	.65
5	Shocking	464 hours at 11.8 cents	54.75	.137	.79
6	Stacking	984 hours at 11.8 cents	116.12	.290	1.68
7	Threshing, labor	970 hours at 11.8 cents	114.46	.286	1.65
8	Threshing, machine	6930 bush. at 1 cent	69.30	.173	1.00
9	Marketing	825 hours at 11.8 cents	97.35	.245	1.40
10	Seed	680 bushels at 70 cents	476.00	1.190	6.87
11	Taxes	400 acres at 26 cents	104.00	.260	1.50
12	Maintenance, horses	400 acres at 92 cents	368.00	.920	5.31
13	Fertilizing, clover and	1000 loads manure	400.00	1.000	5.77
14	Other expenses	400 acres at 50 cents	200.00	.500	2.88
16	Depreciation, machinery	1,860.00 dollars at 10 per cent.	186.00	.465	2.68
16	Depreciation, horses	584.00 dollars at 10 per cent.	58.40	.146	.84
	Annual investment		$2619.63	$6.549	37.78
17	Interest, machinery	1,860.00 dollars at 6 per cent.	111.60	.279	1.62
18	Interest, horses	584.00 dollars at 6 per cent.	35.00	.088	.51
19	Interest, an. investment	2,619.63 dollars at 6 per cent.	157.18	.393	2.27
20	Interest, land	16,880.00 dollars at 6 per cent	1012 80	2.532	14.60
	Total		$3936.21	$9.841	56.78

Total investment, $21,943.63. Average investment per acre, $54.86. Team work, 496 days. Labor, 642.3 days. Value per acre of land, $42.20.

2. *Value of products.*

1	6930 bushels wheat at 64.8 cents; av. 6 years	$4490.64	$11.226	64.80
2	400 acres o straw at $1.20	480.00	1.200	6.92
		$4970.64	$12.426	71.72

3. *Surplus value.*

Value above costs (profits)	$1034.43	$2.585	14.94

Equivalent to 4.72 per cent. on capital invested.

Part IV. Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising wheat.

Annual investment		$2619.63	$6.549	37.78
Machinery	$1,860.00 at 12 per cent.	223.20	.558	3.22
Horses	584.00 at 12 per cent.	70.00	.175	1.03
Annual investment	$2,619.63 at 12 per cent	314.36	.786	4.54
Total expenses less rent		$3227.1[illegible]	$8.068	46.57
Surplus credited to land		*1743.45	4.358	25.15
Total		$4970.64	$12.426	71.72

*Capitalized at 12 per cent. equivalent to $14,523.75 or $36.31 per acre. This is $5.89 per acre below the value reported by the farmers.

In relation to the cost of producing 40 acres of wheat as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XXVII, covering six pages, the cost per each acre in detail, the total cost of 400 acres and the average cost per acre are presented. Table XXVIII is made up of the totals of table XXVII. Table XXIX is a more complete analysis of table XXVII, including besides the expenses of that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XXX, and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost of growing one acre of wheat as computed from table XXVII, is shown below:

Items.	One acre.	One bushel.
	$	Cts.
Plowing	.534	3.09
Harrowing, etc.	.189	1.09
Seeding	.101	.58
Cutting	.113	.65
Shocking	.137	.79
Stacking	.290	1.68
Threshing, labor	.286	1.65
Threshing, machine	.173	1.00
Marketing	.245	1.40
Seed	1.190	6.87
Taxes	.260	1.50
Maintenance, horses	.920	5.31
Fertilizing	1.000	5.77
Other expenses	.600	2.88
Depreciation, machinery	.465	2.68
Depreciation, horses	.146	.84
Annual investment	$6.549	37.78
Interest, machinery	.279	1.62
Interest, horses	.088	.51
Interest, annual investment	.393	2.27
Interest, land	2.532	14.60
Total	$9.841	56.78

OATS—TABLE XXXI.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	8.72	1.79	8.72	2.00	5.56	1.14	5.56	1.27	2.35	.49	2.35	.57
2	10.74	2.62	10.74	2.83	5.68	1.39	5.68	1.49	2.42	.59	2.42	.64
3	10.41	2.64	10.41	3.01	6.54	1.66	6.54	1.92	2.47	.63	2.47	.72
4	11.84	2.85	11.84	3.20	6.96	1.70	6.96	1.88	2.62	.62	2.62	.71
5	11.01	2.39	11.01	2.49	5.80	1.28	5.80	1.31	2.37	.52	2.37	.54
6	11.28	2.52	11.28	2.56	5.81	1.30	5.81	1.33	2.80	.63	2.80	.64
7	9.51	2.18	9.51	2.31	5.44	1.25	5.44	1.3	2.28	.52	2.28	.55
8	10.75	2.38	10.75	2.60	7.06	1.56	7.06	1.71	2.72	.60	2.72	.66
9	10.21	2.26	10.21	2.25	5.95	1.31	5.95	1.31	2.66	.59	2.66	.59
10	9.67	2.06	9.67	2.19	5.64	1.20	5.64	1.27	2.55	.54	2.55	.58
11	10.56	2.49	10.56	2.80	5.32	1.25	5.32	1.39	2.70	.64	2.70	.71
12	11.25	2.69	11.25	2.94	5.58	1.33	5.58	1.46	2.53	.61	2.53	.67
13	10.20	2.25	10.20	2.38	6.40	1.41	6.40	1.50	2.75	.60	2.75	.64
14	10.32	2.54	10.32	2.60	5.40	1.34	5.40	1.35	2.29	.57	2.29	.58
15	11.05	2.55	11.05	2.84	5.85	1.35	5.85	1.50	2.77	.63	2.77	.71
16	9.67	2.18	9.67	2.39	4.96	1.12	4.96	1.23	2.29	.51	2.29	.57
17	13.14	2.93	13.14	3.22	6.20	1.39	6.20	1.53	2.99	.67	2.99	.74
18	10.79	2.45	10.79	2.79	6.72	1.49	6.72	1.73	2.42	.55	2.42	.62
19	11.85	2.[illegible]	11.85	3.10	6.17	1.37	6.17	1.60	2.80	.65	2.80	.74
20	11.36	2.55	11.36	2.95	5.85	1.32	5.85	1.53	2.77	.62	2.77	.72
21	11.44	2.38	11.44	2.60	5.04	1.05	5.04	1.16	2.57	.53	2.57	.58
22	11.85	2.8	11.85	3.08	6.30	1.50	6.30	1.62	2.65	.63	2.65	.68
23	11.90	2.79	11.90	2.97	6.40	1.50	6.40	1.60	2.62	.61	2.62	.65
24	10.46	2.[illegible]	10.46	2.52	4.99	1.07	4.99	1.21	2.39	.51	2.39	.58
25	9.98	2.42	9.98	2.59	5.22	1.28	5.22	1.36	2.59	.64	2.59	.68
26	10.71	2.44	10.71	2.74	5.75	1.32	5.75	1.46	2.52	.58	2.52	.65
27	10.10	2.07	10.10	2.31	5.51	1.13	5.51	1.27	2.55	.52	2.55	.59
28	11.02	2.59	11.02	2.83	6.37	1.51	6.37	1.63	2.72	.64	2.72	.69
29	10.12	2.37	10.12	2.67	6.03	1.41	6.03	1.58	2.77	.65	2.77	.73
30	11.28	2.56	11.28	2.82	6.34	1.44	6.34	1.58	2.49	.57	2.49	.62
31	11.33	2.43	11.33	2.74	6.38	1.38	6.38	1.54	2.50	.53	2.50	.60
32	10.32	2.33	10.32	2.44	5.21	1.18	5.21	1.23	2.67	.60	2.67	.63
33	10.87	2.62	10.87	2.67	6.50	1.50	6.50	1.60	2.75	.64	2.75	.63
34	11.97	2.92	11.97	3.05	5.85	1.44	5.85	1.48	2.66	.65	2.66	.68
35	11.42	2.68	11.42	2.79	5.60	1.33	5.60	1.38	2.84	.67	2.84	.69
36	11.16	2.66	11.16	2.95	6.20	1.48	6.20	1.64	2.80	.66	2.80	.74
37	10.32	2.41	10.32	2.65	5.13	1.20	5.13	1.28	2.50	.59	2.50	.62
38	10.81	2.56	10.81	2.57	5.40	1.29	5.40	1.28	-.64	.62	2.64	.62
39	10.24	2.47	10.24	2.78	6.86	1.65	6.86	1.88	2.95	.71	2.95	.80
40	9.26	2.22	9.26	2.40	5.49	1.31	5.49	1.42	2.34	.56	2.34	.60
Total	430.89	98.86	430.89	107.52	235.46	54.13	235.46	58.86	104.07	23.89	104.07	25.96
Average	1.077	2.471	1.077	2.688	.5886	1.353	.5886	1.471	.2602	.597	.2602	.649

OATS—TABLE XXXI, continued.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE No.	FERTILIZING.				SEED.				SHOCKING AND STACKING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1..........	24.10	4.96	24.10	5.61	4.40	.90	6.67	1.52	5.58	1.14	5.58	1.27
2..........	25.00	6.09	25.00	6.59	4.05	.99	5.82	1.54	5.36	1.30	5.36	1.41
3..........	24.00	6.09	24.00	6.95	4.03	1.03	5.81	1.68	4.56	1.17	4.56	1.33
4..........	25.00	6.00	25.00	6.76	4.49	1.08	6.23	1.68	6.13	1.47	6.13	1.66
5..........	23.70	5.16	23.70	5.37	4.43	.96	6.42	1.45	5.57	1.22	5.57	1.26
6..........	25.00	5.59	25.00	5.68	4.23	.95	6.88	1.56	6.56	1.47	6.56	1.49
7..........	25.00	5.73	25.00	6.08	4.61	1.06	7.05	1.71	4.71	1.08	4.71	1.14
8..........	26.10	5.76	26.10	6.32	4.59	1.01	7.07	1.71	5.86	1.30	5.86	1.42
9..........	27.90	6.17	27.90	6.16	3.87	.86	5.89	1.29	6.51	1.44	6.51	1.43
10..........	25.80	5.49	25.80	5.89	4.25	.91	6.50	1.48	5.4[illegible]	1.16	5.45	1.24
11..........	25.00	5.88	25.00	6.56	3.88	.91	5.52	1.44	6.09	1.41	6.09	1.60
12..........	25.00	5.98	25.00	6.55	3.84	.92	5.54	1.45	5.50	1.32	5.50	1.44
13..........	25.00	5.50	25.00	5.82	4.29	.94	6.91	1.61	6.25	1.37	6.25	1.45
14..........	25.00	6.14	25.00	6.31	3.75	.92	5.73	1.44	5.35	1.31	5.35	1.35
15..........	25.00	5.76	25.00	6.44	4.18	.96	6.02	1.55	6.48	1.50	6.48	1.67
16..........	25.00	5.62	25.00	6.15	4.52	1.02	6.55	1.62	4.28	.96	4.28	1.06
17..........	25.00	5.58	25.00	6.13	3.91	.87	5.49	1.34	7.08	1.59	7.08	1.73
18..........	25.00	5.67	25.00	6.46	3.88	.88	5.54	1.43	6.10	1.38	6.10	1.58
19..........	25.00	5.59	25.00	6.55	3.80	.84	5.21	1.37	7.40	1.64	7.40	1.93
20..........	25.00	5.62	25.00	6.51	4.23	.95	5.98	1.55	6.06	1.36	6.06	1.58
21..........	25.00	5.21	25.00	5.68	4.68	.98	6.55	1.49	5.38	1.12	5.38	1.22
22..........	25.00	5.95	25.00	6.49	3.99	.95	6.74	1.48	6.63	1.58	6.63	1.78
23..........	25.00	5.87	25.00	6.25	4.16	.98	5.98	1.60	6.79	1.59	6.79	1.70
24..........	25.60	6.51	25.60	6.17	4.10	.88	6.80	1.64	6.78	1.24	5.78	1.39
25..........	25.00	6.09	25.00	6.48	4.05	.99	4.62	1.19	6.31	1.53	6.31	1.64
26..........	25.00	5.68	25.00	6.39	3.00	.68	5.75	1.48	5.27	1.19	5.27	1.35
27..........	29.40	6.01	29.40	6.73	4.48	.91	7.45	1.70	5.76	1.18	5.76	1.31
28..........	25.00	5.87	25.00	6.41	4.16	.98	5.98	1.54	6.62	1.55	6.62	1.67
29..........	28.00	6.56	28.00	7.37	3.40	.79	6.32	1.67	6.74	1.58	6.74	1.78
30..........	24.05	5.46	24.05	6.02	4.27	.97	6.17	1.54	5.38	1.22	5.3[illegible]	1.35
31..........	24.45	5.24	24.45	5.90	4.76	1.03	7.05	1.71	6.08	1.30	6.08	1.47
32..........	25.10	6.67	25.10	5.92	4.00	.90	7.00	1.65	5.66	1.27	5.66	1.33
33..........	24.50	5.69	24.50	6.04	4.70	1.09	6.91	1.69	5.84	1.35	6.84	1.43
34..........	24.[illegible]	[illegible].07	24.95	6.35	4.17	1.02	6.44	1.64	5.40	1.31	5.40	1.38
35..........	24.35	5.75	24.35	6.96	3.96	.94	6.36	1.56	7.12	1.69	7.12	1.74
36..........	24.10	5.72	24.10	6.37	4.51	1.07	6.29	1.67	6.10	1.45	6.10	1.62
37..........	24.10	5.63	24.10	5.95	4.30	1.01	6.50	1.60	5.91	1.39	5.91	1.46
38..........	19.80	4.69	19.80	4.72	4.64	1.09	7.21	1.72	6.45	1.52	6.45	1.54
39..........	25.35	6.11	25.35	6.89	4.50	1.09	6.20	1.68	6.20	1.49	6.20	1.[illegible]
40..........	25.20	6.04	25.20	6.53	4.87	1.16	7.00	1.82	5.85	1.41	5.85	1.52
Total..	1000.55	229.20	1000.55	249.41	167.93	38.47	251.15	62.39	238.15	54.55	238.15	59.40
Average.	2.501	5.730	2.501	6.235	.4198	.962	.6279	1.559	.5954	1.364	.5954	1.485

OATS—TABLE XXXI, continued.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE No.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years $	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1..........	8.28	1.70	7.42	1.70	9.74	2.00	8.74	2.00	30.60	6.28	30.60	7.00
2..........	7.38	1.80	6.81	1.80	6.56	1.60	6.06	1.60	26.10	6.36	26.10	6.89
3..........	6.70	1.70	5.86	1.70	7.48	1.89	6.55	1.89	26.70	6.78	26.70	7.74
4..........	8.32	2.00	7.40	2.00	6.65	1.60	5.92	1.60	31.30	7.52	31.30	8.46
5..........	7.80	1.70	7.51	1.70	7.34	1.60	7.07	1.60	37.20	8.11	37.20	8.42
6..........	7.16	1.59	7.05	1.59	5.82	1.29	5.73	1.29	31.08	6.94	31.08	7.04
7..........	7.19	1.65	6.78	1.65	6.76	1.55	6.37	1.55	30.60	7.02	30.60	7.44
8..........	8.15	1.80	7.43	1.80	9.51	2.10	8.67	2.10	33.00	7.28	33.00	7.99
9..........	8.13	1.80	8.15	1.80	9.04	2.00	9.06	2.00	33.60	7.43	33.60	7.42
10..........	7.99	1.70	7.48	1.70	8.46	1.80	7.92	1.80	33.30	7.09	33.30	7.57
11..........	8.50	2.00	7.62	2.00	8.07	1.92	7.24	1.90	29.40	6.92	29.40	7.72
12..........	7.10	1.70	6.49	1.70	7.52	1.80	6.87	1.80	27.30	6.53	27.30	7.14
13..........	8.17	1.79	7.72	1.79	8.62	1.90	8.15	1.90	33.90	7.49	33.90	7.90
14..........	8.14	2.00	7.92	2.00	5.69	1.39	5.54	1.39	28.08	6.89	28.08	7.09
15..........	7.81	1.80	6.98	1.80	5.64	1.29	5.04	1.30	30.66	7.06	30.66	7.90
16..........	8.45	1.90	7.69	1.90	7.66	1.70	6.88	1.70	25.80	5.80	25.80	6.37
17..........	7.61	1.70	6.93	1.70	8.06	1.80	7.34	1.80	30.90	6.89	30.90	7.57
18..........	8.37	1.90	7.35	1.90	11.02	2.50	9.68	2.50	33.30	7.65	33.30	8.60
19..........	9.41	2.10	8.02	2.10	7.17	1.60	6.11	1.60	27.60	6.16	27.60	7.28
20..........	7.56	1.70	6.53	1.70	8.01	1.80	6.92	1.80	33.00	7.42	33.00	8.59
21..........	8.64	1.80	7.92	1.80	7.20	1.50	6.60	1.50	31.02	6.46	31.02	7.05
22..........	7.98	1.90	7.31	1.90	6.72	1.60	6.16	1.60	32.70	7.79	32.70	8.49
23..........	7.67	1.80	7.20	1.80	8.52	2.00	8.00	2.00	24.48	5.28	24.48	6.12
24..........	9.76	2.10	8.72	2.10	8.83	1.90	7.89	1.90	36.90	7.93	36.90	8.89
25..........	7.39	1.79	6.94	1.79	7.70	1.89	7.33	1.89	22.98	6.59	22.98	6.96
26..........	7.92	1.80	7.03	1.80	8.36	1.90	7.42	1.90	31.50	7.16	31.50	8.05
27..........	8.80	1.80	7.86	1.80	5.38	1.10	4.80	1.10	35.28	7.21	35.28	8.07
28..........	8.09	1.90	7.41	1.90	9.80	2.30	8.97	2.30	31.50	7.39	31.50	8.08
29..........	7.68	1.80	6.84	1.80	8.52	2.00	7.60	2.00	30.90	7.23	30.90	8.13
30..........	6.61	1.50	6.00	1.50	7.49	1.70	6.80	1.70	32.10	7.28	32.10	8.02
31..........	8.39	1.80	7.45	1.80	7.92	1.70	7.03	1.70	30.30	6.50	30.30	7.32
32..........	7.09	1.60	6.78	1.60	7.97	1.80	7.63	1.80	29.34	6.62	29.34	6.92
33..........	7.33	1.70	6.66	1.70	6.90	1.60	6.93	1.60	31.50	7.31	31.50	7.72
34..........	6.99	1.70	6.68	1.70	6.57	1.60	6.28	1.60	35.40	8.61	35.40	9.00
35..........	8.46	2.00	8.18	2.00	6.81	1.60	6.54	1.60	33.90	8.02	33.90	8.28
36..........	8.00	1.90	7.20	1.90	6.74	1.60	6.06	1.60	36.60	8.69	36.60	9.63
37..........	6.85	1.60	6.48	1.60	6.42	1.50	6.07	1.50	31.50	7.35	31.50	7.77
38..........	8.88	2.10	8.82	2.10	8.04	1.90	7.98	1.90	34.80	8.22	34.80	8.29
39..........	6.64	1.60	5.88	1.60	7.05	1.70	6.25	1.70	26.10	6.29	26.10	7.09
40..........	7.09	1.70	6.56	1.70	7.09	1.70	6.56	1.70	30.90	7.41	30.90	8.01
Total..	314.48	71.92	289.06	71.92	304.75	69.72	280.76	69.71	1243.12	283.80	1243.12	308.97
Average.	.7862	1.798	.7226	1.798	.7619	1.748	.7019	1.743	3.108	7.096	3.108	7.724

OATS—TABLE XXXI, continued.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1............	6.81	1.39	6.81	1.54	2.50	.51	2.50	.57	5.00	1.03	5.00	1.14
2............	3.67	.89	3.67	.96	2.50	.61	2.50	.66	5.00	1.23	5.00	1.33
3............	6.85	1.73	6.85	1.98	2.50	.63	2.50	.73	5.00	1.27	5.00	1.45
4............	4.90	1.18	4.90	1.33	2.50	.60	2.50	.67	5.00	1.20	5.00	1.34
5............	5.20	1.13	5.20	1.17	2.50	.64	2.50	.56	5.00	1.08	5.00	1.13
6............	5.00	1.11	5.00	1.13	2.50	.65	2.50	.56	5.00	1.11	5.00	1.13
7............	6.83	1.57	6.83	1.66	2.50	.57	2.50	.61	5.00	1.15	5.00	1.22
8............	4.00	.88	4.00	.97	2.50	.55	2.50	.60	5.00	1.10	5.00	1.20
9............	4.65	1.03	4.65	1.08	2.50	.55	2.50	.55	5.00	1.10	5.00	1.10
10............	4.65	.99	4.65	1.06	2.50	.53	2.50	.56	5.00	1.06	5.00	1.13
11............	4.40	1.03	4.40	1.15	2.50	.59	2.50	.66	5.00	1.18	5.00	1.32
12............	4.00	.98	4.00	1.05	2.50	.59	2.50	.65	5.00	1.18	5.00	1.30
13............	4.50	.99	4.50	1.04	2.50	.55	2.50	.58	5.00	1.10	5.00	1.17
14............	4.00	.98	4.00	1.01	2.50	.61	2.50	.63	5.00	1.23	5.00	1.27
15............	2.70	.62	2.70	.69	2.50	.58	2.50	.65	5.00	1.16	5.00	1.30
16............	4.48	1.01	4.48	1.10	2.50	.56	2.50	.62	5.00	1.12	5.00	1.24
17............	5.60	1.25	5.60	1.37	2.50	.65	2.50	.61	5.00	1.11	5.00	1.22
18............	3.96	.92	3.96	1.02	2.50	.56	2.50	.65	5.00	1.12	5.00	1.31
19............	4.50	1.01	4.50	1.19	2.50	.55	2.50	.65	5.00	1.11	5.00	1.30
20............	3.60	.78	3.60	.92	2.50	.56	2.50	.65	5.00	1.12	5.00	1.31
21............	3.30	.69	3.30	.75	2.50	.52	2.50	.56	5.00	1.05	5.00	1.13
22............	4.50	1.07	4.50	1.17	2.50	.59	2.50	.64	5.00	1.19	5.00	1.28
23............	4.60	1.08	4.60	1.15	2.50	.59	2.50	.62	5.00	1.18	5.00	1.24
24............	4.73	1.02	4.73	1.14	2.50	.54	2.50	.60	5.00	1.08	5.00	1.20
25............	3.65	.93	3.85	.99	2.50	.60	2.50	.64	5.00	1.20	5.00	1.29
26............	4.00	.91	4.00	1.03	2.50	.56	2.50	.63	5.00	1.13	5.00	1.27
27............	5.37	1.09	5.37	1.22	2.50	.51	2.50	.57	5.00	1.03	5.00	1.15
28............	4.00	.93	4.00	1.02	2.50	.58	2.50	.64	5.00	1.17	5.00	1.29
29............	5.75	1.35	5.75	1.61	2.50	.58	2.50	.65	5.00	1.17	5.00	1.31
30............	3.60	.81	3.60	.90	2.50	.56	2.50	.62	5.00	1.12	5.00	1.25
31............	6.63	1.43	6.63	1.60	2.50	.53	2.50	.60	5.00	1.07	5.00	1.20
32............	4.00	.90	4.00	.94	2.50	.56	2.50	.59	5.00	1.12	5.00	1.18
33............	4.18	.97	4.18	1.02	2.50	.58	2.50	.61	5.00	1.16	5.00	1.22
34............	5.72	1.39	5.72	1.46	2.50	.60	2.50	.63	5.00	1.20	5.00	1.27
35............	5.50	1.30	5.50	1.34	2.50	.59	2.50	.61	5.00	1.18	5.00	1.22
36............	5.13	1.21	5.13	1.35	2.50	.59	2.50	.65	5.00	1.19	5.00	1.31
37............	4.87	1.14	4.87	1.20	2.50	.58	2.50	.61	5.00	1.16	5.00	1.23
38............	3.74	.88	3.74	.89	2.50	.59	2.50	.59	5.00	1.18	5.00	1.19
39............	3.67	.86	3.57	.98	2.50	.60	2.50	.67	5.00	1.20	5.00	1.35
40............	4.60	1.11	4.60	1.19	2.50	.60	2.50	.64	5.00	1.20	5.00	1.29
Total....	185.8	42.54	185.84	46.22	100.00	22.79	100.00	24.79	200.00	45.74	200.00	49.78
Average.	.4646	1.063	.4646	1.156	.250	.569	.250	.619	.500	1.143	.500	1.244

OATS—TABLE XXXI, continued.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE NUMBER.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1....	113.64	23.33	114.05	26.09	50.80	10.41	50.80	11.62	79.83	16.3	108.94	24.7
2....	104.46	25.47	105.16	27.74	42.00	10.24	42.00	11.08	66.42	16.2	88.30	23.3
3....	107.24	27.22	107.25	31.10	40.00	10.15	40.00	11.58	65.99	16.8	83.49	24.2
4....	115.71	27.82	115.80	31.29	45.00	10.81	45.00	12.16	74.04	17.8	89.54	24.2
5....	117.92	25.69	119.35	27.00	53.20	11.59	53.20	12.03	79.86	17.4	111.38	25.2
6....	112.24	25.05	114.69	26.00	45.00	10.04	45.00	10.20	74.36	16.6	119.07	27.
7....	110.43	25.33	112.07	27.25	49.50	11.35	49.50	12.04	75.86	17.4	109.32	26.6
8....	119.24	26.32	120.16	29.08	47.35	10.45	47.35	11.46	77.01	17.	108.20	26.2
9....	120.02	26.54	122.08	26.93	51.78	11.44	51.78	11.45	77.44	17.2	120.04	26.6
10....	115.26	24.53	116.46	26.47	47.05	10.01	47.05	16.95	79.90	17.	114.40	26.
11....	111.42	26.22	111.35	29.25	41.00	9.65	41.00	10.76	67.67	16.9	87.63	23.
12....	107.12	25.63	107.56	28.15	42.00	10.05	42.00	10.99	66.88	16.	88.24	23.1
13....	117.58	26.89	119.28	27.78	46.00	10.31	46.00	10.72	74.71	16.6	114.11	26.6
14....	105.52	25.92	107.13	27.02	44.00	10.81	44.00	11.11	67.96	16.7	100.98	25.5
15....	109.64	25.26	110.05	28.35	44.00	10.13	44.00	11.34	71.17	16.4	91.67	38.8
16....	104.61	23.50	105.10	25.95	44.00	9.88	44.00	10.86	80.64	18.1	106.11	26.2
17....	117.99	26.33	118.17	28.96	45.00	10.04	45.00	11.03	76.16	17.	97.51	23.9
18....	119.06	26.97	118.36	30.59	45.00	10.20	45.00	11.62	71.44	16.2	89.78	23.2
19....	113.20	25.27	112.16	29.36	43.00	9.62	43.00	11.25	75.71	16.9	88.62	23.2
20....	114.84	25.80	114.47	29.81	42.00	9.43	42.00	10.93	72.53	16.3	88.32	23.
21....	111.77	23.29	112.32	25.52	44.00	9.16	44.00	10.00	93.60	19.5	120.12	27.
22....	115.82	27.57	116.34	30.21	44.00	10.47	44.00	11.43	66.78	15.9	88.55	23.
23....	109.64	25.27	110.47	27.60	44.00	10.32	44.00	11.00	72.41	17.	92.00	23.
24....	121.04	26.03	121.76	29.34	51.35	11.43	51.35	12.37	76.26	16.4	112.88	27.2
25....	102.57	24.95	102.32	26.50	42.00	10.21	42.00	10.89	69.45	16.9	105.76	27.4
26....	111.53	25.35	112.45	28.75	42.00	9.54	42.00	10.74	70.40	16.	89.93	23.
27....	120.13	24.56	121.58	27.82	58.85	12.03	58.85	13.47	81.17	16.6	120.61	27.6
28....	116.78	27.41	117.09	30.02	43.00	10.09	43.00	11.02	68.16	16.	89.70	23.
29....	117.41	27.49	118.57	31.20	50.00	11.71	50.00	13.16	68.32	16.	87.40	23.
30....	111.11	25.19	111.71	27.92	45.95	10.42	45.95	11.49	75.41	17.1	98.80	24.7
31....	116.24	24.94	116.70	28.18	48.80	10.47	48.80	11.78	79.22	17.	104.32	25.2
32....	108.86	24.55	111.21	26.23	56.50	12.75	56.50	13.32	70.88	16.	118.72	28.
33....	112.57	26.11	114.14	27.93	50.70	11.76	50.70	12.42	74.99	17.4	104.44	25.6
34....	117.18	28.51	118.85	30.24	49.50	12.02	49.50	12.57	67.81	16.5	101.39	25.8
35....	117.46	27.75	119.31	29.17	49.60	11.72	49.60	12.12	69.79	16.5	108.38	26.5
36....	118.84	28.22	119.14	31.43	42.05	9.98	42.05	11.09	74.51	17.7	93.61	24.7
37....	109.40	25.56	110.88	27.37	49.80	11.63	49.80	12.29	73.62	17.2	105.30	26.
38....	112.70	26.64	115.15	27.41	50.30	11.89	50.30	11.97	72.76	17.2	112.14	26.7
39....	106.96	25.77	107.10	29.10	43.15	10.39	43.15	11.71	74.70	18.	91.26	24.8
40....	110.19	26.42	111.26	28.82	43.40	10.40	43.40	11.24	72.56	17.4	96.50	25.
Total	4525.24	1035.67	4559.06	1134.93	1856.63	425.00	1856.63	467.26	2947.73	674.0	4047.36	1017.6
Aver.	11.313	25.89	11.397	28.37	4.642	10.6	4.642	11.68	7.369	16.8	10.12	25.44

OATS—TABLE XXXI, continued.

Cost of production and value of products of 400 acres of oats in 10 acre lots.

OFFICE No.	TOTAL VALUE OF PRODUCT RAISED.				PROFIT.				LOSS.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1.......	130.18	26.71	159.74	36.32	16.54	3.38	45.69	10.23	......	......	......	......
2.......	108.42	26.44	130.30	34.38	3.96	.97	25.14	6.64	......	......	......	......
3.......	105.99	26.95	123.49	35.78	......	......	16.24	4.68	1.25	.27	......	......
4.......	119.04	28.61	134.54	36.36	3.33	.79	18.74	5.07	......	......	......	......
5.......	133.06	28.99	164.58	37.23	15.14	3.30	45.23	10.23	......	......	......	......
6.......	119.36	26.64	164.07	37.20	7.12	1.59	49.38	11.20	......	......	......	......
7.......	125.36	28.75	158.82	38.64	14.93	3.42	46.75	11.39	......	......	......	......
8.......	124.36	27.45	155.55	37.66	5.12	1.13	35.39	8.58	......	......	......	......
9.......	129.22	28.64	171.82	37.95	9.20	2.10	49.74	11.02	......	......	......	......
10.......	126.95	27.01	161.45	42.95	11.69	2.48	44.99	16.48	......	......	......	......
11.......	108.57	25.55	128.63	33.76	......	......	17.28	4.51	2.85	.67	......	......
12.......	108.68	26.05	130.24	34.09	1.76	.42	22.68	5.94	......	......	......	......
13.......	120.71	28.81	160.11	37.32	3.13	.92	40.83	9.54	......	......	......	......
14.......	111.96	27.51	144.98	36.61	6.44	1.59	37.85	9.59	......	......	......	......
15.......	115.17	26.53	135.57	50.14	5.53	1.27	25.52	21.79	......	......	......	......
16.......	124.64	27.98	160.11	37.06	20.03	4.48	45.01	11.11	......	......	......	......
17.......	121.16	27.04	142.51	34.93	3.17	.71	24.34	5.97	......	......	......	......
18.......	116.44	26.40	134.78	34.82	......	......	16.42	4.23	2.62	.57	......	......
19.......	118.71	28.52	131.62	34.45	6.51	1.25	19.46	5.09	......	......	......	......
20.......	114.63	25.73	130.32	33.93	......	......	15.85	4.12	.31	.07	......	......
21.......	137.60	28.66	164.12	37.00	25.83	5.37	51.80	11.48	......	......	......	......
22.......	110.78	26.37	132.55	34.43	......	......	16.21	4.22	5.04	1.20	......	......
23.......	116.41	27.32	136.00	34.00	6.77	2.05	25.53	6.40	......	......	......	......
24.......	127.61	27.83	164.23	39.57	6.57	1.80	42.47	10.23	......	......	......	......
25.......	111.45	27.11	147.76	38.29	8.88	2.16	45.44	11.79	......	......	......	......
26.......	112.40	25.54	131.93	33.74	.87	.19	19.48	4.99	......	......	......	......
27.......	140.02	28.63	179.46	41.07	19.89	4.07	67.88	13.25	......	......	......	......
28.......	111.16	26.09	132.70	34.02	......	......	15.61	4.00	5.62	1.32	......	......
29.......	118.32	27.71	137.40	36.16	.91	.22	18.83	4.96	......	......	......	......
30.......	121.36	27.52	144.75	36.19	10.25	2.33	33.04	8.27	......	......	......	......
31.......	128.02	27.47	153.12	36.98	11.78	2.53	36.42	8.80	......	......	......	......
32.......	127.38	28.75	175.22	41.32	18.52	4.20	64.01	15.09	......	......	......	......
33.......	125.69	29.16	165.14	38.02	13.12	3.05	41.00	10.09	......	......	......	......
34.......	117.31	28.52	150.89	38.37	.13	.01	32.04	8.13	......	......	......	......
35.......	119.39	28.22	157.98	38.62	1.93	.47	38.67	9.45	......	......	......	......
36.......	116.56	27.68	135.66	35.79	......	......	16.52	4.36	2.28	.54	......	......
37.......	123.42	28.83	135.10	38.29	14.02	3.27	44.22	10.92	......	......	......	......
38.......	123.06	29.09	162.44	38.67	10.36	2.45	47.29	11.26	......	......	......	......
39.......	117.85	28.39	134.41	36.51	10.89	2.62	27.31	7.41	......	......	......	......
40.......	115.96	27.80	139.90	36.24	5.77	1.38	28.64	7.42	......	......	......	......
Total.	4804.36	1099.00	5903.99	1484.86	299.09	67.97	1344.94	349.93	19.97	4.64	......	......
Average	12.011	27.50	14.760	37.12	.748	1.699	3.362	8.75	.499	.116	......	......

TABLE XXXII.—SUMMARY OF TABLE XXXI.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 400 acres of oats and the average cost per acre and bushel, the total value of products of 400 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

1. *Cost of production.*

Items.	400 acres, 1898.	One acre.	Bush.	400 acres, 5 years.	One acre.	Bush.
	$	$	Cts.	$	$	Cts.
Plowing	430.89	1.077	2.47	430.89	1.077	2.69
Harrowing and seeding	235.46	.588	1.35	235.46	.588	1.47
Cutting	104.07	.260	.60	104.07	.260	.65
Fertilizing	1000.55	2.501	5.73	1000.55	2.501	6.24
Seed	167.93	.420	.96	251.15	.628	1.56
Shocking and stacking	238.15	.595	1.36	238.15	.595	1.48
Threshing	314.48	.787	1.80	289.06	.723	1.80
Marketing	304.75	.762	1.75	280.76	.702	1.74
Interest	1243.12	3.108	7.09	1243.12	3.108	7.73
Wear and tear	185.84	.465	1.07	185.84	.465	1.16
Taxes	100.00	.250	.57	100.00	.250	.62
Other expenses	200.00	.500	1.14	200.00	.500	1.24
	4525.24	11.313	25.89	4559.05	11.397	28.37

2. *Value of products.*

Value of grain	2947.73	7.369	16.80	4047.36	10.118	25.44
Value of straw	1856.63	4.642	10.60	1856.63	4.642	11.68
Total value	4804.36	12.011	27.40	5903.99	14.760	37.12

3. *Profit and loss.*

Profit	299.09	.7477	2.75	1344.94	3.362	8.75
Loss	19.97	.0499	1.16	....	....	....
Balance profit	279.12	.6978	1.59	1344.94	3.362	8.75

TABLE XXXIII.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF OATS.

The data upon which the calculations in the tables on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value or Cost," as the case may be. In Section 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same, and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation, wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	One Bush.
			$	$	Cts.
1	Plowing	1812 hours at 24 cents	434.88	1.087	2.84
2	Harrowing, etc.	640 hours at 24 cents	153.60	.384	.99
3	Seeding	344 hours at 24 cents	82.56	.206	.54
4	Cutting	384 hours at 24 cents	92.16	.230	.60
5	Shocking	464 hours at 11.8 cents	54.75	.137	.36
6	Stacking, man and team	492 hours at 24 cents	118.08	.295	.77
7	Stacking, extra man	492 hours at 11.8 cents	58.06	.145	.37
8	Threshing, labor	1162 hours at 11.8 cents	137.12	.344	.89
9	Threshing, machine	15379 bush. at 1 cent	153.79	.385	1.00
10	Marketing	1025 hours at 24 cents	246.00	.615	1.59
11	Seed	1000 bush. at 35 cents	350.00	.875	2.27
12	Taxes	400 acres at 26 cents	104.00	.260	.68
13	Fertilizers, clover and	1000 loads manure	400.00	1.000	2.60
14	Other expenses	400 acres at 50 cents	200.00	.500	1.30
15	Depreciation, machinery	1860.00 dollars at 10 per cent.	186.00	.465	1.21
	Annual investment		2771.00	6.928	18.01
16	Interest, machinery	1860.00 dollars at 6 per cent.	111.60	.279	.72
17	Interest, an. investment	2771.00 dollars at 6 per cent.	166.26	.415	1.08
18	Interest, land	16880.00 dollars at 6 per cent.	1012.80	2.532	6.58
	Total		4061.66	10.154	26.39

Total investment, $21,511.00. Average investment per acre, $53.78. Team work, 469.7 days. Labor, 681.6 days. Value per acre of land, $42.20.

2. *Value of products.*

1	15379 bushels oats at 24.5 cents, av. 6 yrs	3767.85	9.419	24.50
2	400 acres straw at $2.30	920.00	2.300	5.97
		4687.85	11.719	30.47

3. *Surplus value.*

Value above cost (profit)	626.19	1.565	4.08

Equivalent to 2.89 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cnt. gives the value of the land for raising oats.

Annual investment		2771.00	6.928	18.01
Machinery	$1,860.00 at 12 per cent.	223.20	.558	1.44
Annual investment	2,771.00 at 12 per cent.	332.52	.831	2.17
Total expenses less rent		3326.72	8.317	21.62
* Surplus credited to land		1361.13	3.402	8.85
Total		4687.85	11.719	30.47

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* Capitalized at 12 per cent. equivalent to $11,342.92 or $28.35 per acre. This is $13.85 per acre below the value reported by the farmers.

TABLE XXXIV.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF OATS.

The data upon which the calculations in the table on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and the necessary profit at 12 per cent. on same and upon the value of machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.	400 acres.	One acre.	One Bush.
		$	$	Cts.
1	Plowing ....1812 hours at 11.8 cents	213.81	.534	1.39
2	Harrowing, etc. .... 640 hours at 11.8 cents	75.52	.189	.49
3	Seeding .... 344 hours at 11.8 cents	40.59	.101	.26
4	Cutting .... 384 hours at 11.8 cents	45.33	.113	.29
5	Shocking .... 464 hours at 11.8 cents	54.75	.137	.36
6	Stacking .... 984 hours at 11.8 cents	116.12	.290	.76
7	Threshing, labor ....1162 hours at 11.8 cents	137.12	.343	.89
8	Threshing, machine ....15379 bush. at 1 cent	153.79	.385	1.00
9	Marketing ....1025 hours at 11.8 cents	120.95	.302	.79
10	Seed ....1000 bush. at 35 cents	350.00	.875	2.27
11	Taxes .... 400 acres at 26 cents	104.00	.260	.68
12	Maintenance horses .... 400 acres at 92 cents	368.00	.920	2.40
13	Fertilizing, clover and ....1000 loads manure....	400.00	1.000	2.60
14	Other expenses .... 400 acres at 50 cents	200.00	.500	1.30
15	Depreciation, machinery..1860.00 dollars at 10 per cent.	186.00	.465	1.21
16	Depreciation, horses....... 584.00 dollars at 10 per cent.	58.40	.146	.38
	Annual investment	2624.38	6.560	17.07
17	Interest, machinery ......1860.00 dollars at 6 per cent.	111.60	.279	.72
18	Interest, horses .... 584.00 dollars at 6 per cent.	35.00	.088	.23
19	Interest, an. investment..2624.38 dollars at 6 per cent.	157.46	.394	1.02
20	Interest, land ....16880.00 dollars at 6 per cent.	1012.80	2.532	6.58
	Total	3941.24	9.853	25.62

Total investment, $21,948.38 Average investment per acre, $54.87. Team work, 516.1 days. Labor, 681.5 days. Value per acre of land, $42.20.

2. *Value of products.*

1	15379 bushels oats at 24.5 cents, av. 6 yrs...............	3767.85	9.419	24.50
2	400 acres straw, $2.30...	920.00	2.300	5.90
	Total	4687.85	11.719	30.40

3. *Surplus value.*

1	Value above costs (profit).................................	746.61	1.866	4.80

Equivalent to 3.42 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising oats.

Annual investment	2624.38	6.560	17.07
Machinery ....$1,860.00 at 12 per cent.	223.20	.558	1.44
Horses .... 584.00 at 12 per cent.	70.00	.175	.46
Annual investment .... 2,624.38 at 12 per cent.	314.92	.788	2.05
Total expenses less rent..................................	3232.50	8.081	21.01
* Surplus credited to land	1455.35	3.638	9.46
Total	4687.85	11.719	30.47

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*Capitalized at 12 per cent. equivalent to $12.127.25 or $30.32 per acre. This is $11.88 per acre below the value reported by the farmers.

In relation to the cost of producing 400 acres of oats as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XXXI, covering six pages, the cost per each acre in detail, the total cost of 400 acres and the average cost per acre are presented. Table XXXII is made up of the totals of table XXXI. Table XXXIII is a more complete analysis of table XXXI, including beside the expenses in that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they est on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XXXIV, and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost per acre and bushel of growing oats as computed from table XXXI is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.534	1.39
Harrowing, etc.	.189	.49
Seeding	.101	.26
Cutting	.113	.29
Shocking	.137	.36
Stacking	.290	.76
Threshing, labor	.343	.89
Threshing, machine	.385	1.00
Marketing	.302	.79
Seed	.875	2.27
Taxes	.260	.68
Maintenance horses	.920	2.40
Fertilizing	1.000	2.60
Other expenses	.500	1.30
Depreciation, machinery	.465	1.21
Depreciation, horses	.146	.38
Annual investment	6.560	17.07
Interest, machinery	.279	.72
Interest, horses	.088	.23
Interest, annual investment	.394	1.02
Interest, land	2.532	6.58
Total	9.853	25.62

RYE—TABLE XXXV.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	8.72	4.13	8.72	4.49	5.56	2.64	5.56	2.86	2.35	1.12	2.35	1.22
2	10.74	5.37	10.74	5.90	5.68	2.84	5.68	3.13	2.42	1.21	2.42	1.33
3	10.41	5.72	10.41	6.23	6.54	3.58	6.54	3.91	2.47	1.36	2.47	1.47
4	11.84	5.98	11.84	7.01	6.96	3.52	6.96	4.12	2.62	1.32	2.62	1.65
5	11.01	6.22	11.01	6.51	5.80	3.28	5.80	3.43	2.37	1.33	2.37	1.40
6	11.28	5.45	11.28	6.37	5.81	2.81	5.81	2.77	2.80	1.35	2.80	1.34
7	9.51	4.38	9.51	4.64	5.44	2.50	5.44	2.65	2.28	1.05	2.28	1.11
8	10.75	5.27	10.75	5.83	7.06	3.46	7.06	3.83	2.72	1.33	2.72	1.48
9	10.21	5.08	10.21	6.01	5.95	2.96	5.95	3.50	2.66	1.27	2.66	1.56
10	9.67	4.26	9.67	4.72	5.64	2.48	5.64	2.76	2.55	1.12	2.55	1.23
11	10.56	5.42	10.56	6.14	5.32	2.73	5.32	3.09	2.70	1.39	2.70	1.67
12	11.25	5.68	11.25	6.25	5.58	2.82	5.58	3.10	2.53	1.28	2.53	1.41
13	10.20	5.39	10.20	5.08	6.40	3.40	6.40	3.19	2.75	1.46	2.75	1.37
14	10.32	5.38	10.32	5.34	5.40	2.82	5.40	2.80	2.29	1.19	2.29	1.14
15	11.05	5.55	11.05	6.12	5.85	2.94	5.85	3.20	2.77	1.39	2.77	1.52
16	9.67	4.12	9.67	4.65	4.96	2.11	4.96	2.38	2.29	.98	2.29	1.10
17	13.14	7.10	13.14	7.97	6.20	3.36	6.20	3.76	2.99	1.61	2.99	1.80
18	10.79	5.39	10.79	5.99	6.72	3.36	6.72	3.73	2.42	1.21	2.42	1.34
19	11.85	5.66	11.85	6.23	6.17	2.96	6.17	3.24	2.80	1.34	2.80	1.47
20	11.36	5.64	11.36	6.32	5.85	2.91	5.85	3.25	2.77	1.38	2.77	1.54
21	11.44	5.18	11.44	5.29	5.04	2.28	5.04	2.34	2.57	1.16	2.57	1.19
22	11.86	5.93	11.85	6.59	6.30	3.16	6.30	3.50	2.65	1.33	2.65	1.47
23	11.90	5.96	11.90	6.61	6.40	3.19	6.40	3.65	2.62	1.31	2.62	1.46
24	10.46	5.33	10.46	5.23	4.99	2.55	4.99	2.49	2.39	1.22	2.39	1.20
25	9.98	5.43	9.98	5.31	5.22	2.84	5.22	2.77	2.59	1.42	2.59	1.39
26	10.71	5.35	10.71	5.95	5.75	2.88	5.75	3.18	2.52	1.26	2.52	1.40
27	10.10	4.83	10.10	4.98	5.51	2.64	5.51	2.72	2.55	1.22	2.55	1.25
28	11.02	5.40	11.02	6.06	6.37	3.13	6.37	3.50	2.72	1.34	2.72	1.49
29	10.12	4.93	10.12	5.62	6.03	2.95	6.03	3.33	2.77	1.35	2.77	1.53
30	11.28	5.48	11.28	6.00	6.34	3.08	6.34	3.37	2.40	1.17	2.40	1.37
31	11.33	5.86	11.33	6.33	6.38	3.30	6.38	3.56	2.50	1.30	2.50	1.40
32	10.32	5.32	10.32	5.01	5.21	2.69	5.21	2.54	2.67	1.37	2.67	1.29
33	10.87	4.59	10.87	5.18	6.50	2.75	6.50	3.09	2.75	1.16	2.75	1.31
34	11.97	6.50	11.97	6.85	5.85	3.17	5.85	3.35	2.66	1.44	2.66	1.52
35	11.42	5.79	11.42	5.74	5.60	2.85	5.60	2.81	2.84	1.45	2.84	1.43
36	11.16	6.42	11.16	6.85	6.20	3.57	6.20	3.80	2.80	1.61	2.80	1.72
37	10.32	5.04	10.32	5.38	5.13	2.50	5.13	2.67	2.50	1.22	2.50	1.30
38	10.81	5.06	10.81	5.32	5.40	2.54	5.40	2.67	2.64	1.24	2.64	1.30
39	10.24	5.39	10.24	6.09	6.86	3.61	6.86	4.10	2.95	1.56	2.95	1.76
40	9.26	4.88	9.26	5.29	5.49	2.89	5.49	3.14	2.34	1.24	2.34	1.34
Total	430.89	215.86	430.89	232.48	235.46	118.05	235.46	127.18	103.98	52.06	103.98	55.97
Average.	1.077	5.396	1.077	5.812	.5886	2.951	.5886	3.179	.2599	1.301	.2599	1.399

RYE—TABLE XXXV, continued.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE No.	FERTILIZING.				SEED.				SHOCKING AND STACKING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	15.00	7.11	15.00	7.73	5.34	2.64	7.05	3.63	5.58	2.64	5.58	2.88
2	15.00	7.50	15.00	8.24	5.62	2.81	7.66	4.21	5.36	2.68	5.36	2.94
3	15.00	8.25	15.00	8.98	4.66	2.56	6.78	4.06	4.66	2.52	4.56	2.73
4	15.00	7.59	15.00	8.87	5.06	2.55	6.72	3.9[illegible]	6.13	3.09	6.13	3.62
5	15.75	8.89	15.75	9.32	5.64	3.19	7.64	4.45	5.57	3.16	5.57	3.29
6	15.00	7.25	15.00	7.14	5.94	2.88	8.37	3.98	6.56	3.18	6.56	3.12
7	15.00	6.91	15.00	7.32	4.93	2.28	6.67	3.25	4.71	2.17	4.71	2.30
8	15 50	7.60	15 60	8.43	5.52	2.71	7.65	4.15	5.86	2.87	5.86	3.18
9	15.50	7.71	15.50	9.12	5.97	2.97	7.82	4.60	6.51	3.23	6.51	3.83
10	15.10	6.65	15.10	7.36	7.12	3.14	9.36	4.56	5.45	2.40	5.45	2.67
11	15.00	7.70	15.00	8.72	5.61	2.82	7.42	4.32	6.09	3.12	6.09	3.54
12	15.00	7.58	15.00	8.33	5.41	2.74	7.42	4.13	5.50	2.78	5.50	3.06
13	15.00	7.94	15.00	7.47	6.10	3.23	8.67	4.32	6.25	3.30	6.25	3.11
14	15.00	7.82	15.00	7.78	5.44	2.83	7.99	4.15	5.35	2.78	5.35	2.77
15	15.00	7.53	15.00	8.24	5.66	2.84	7.77	4.27	6.48	3.25	6.48	3.57
16	15.00	6.41	15.00	7.22	5.19	2.22	7.18	3.45	4.28	1.83	4.28	2.06
17	15.00	8.11	15.00	9.09	5.49	2.96	7.20	4.36	7.08	3.83	7.08	4.29
18	15.00	7.50	15.00	8.33	5.85	2.93	7.96	4.42	6.10	3.05	6.10	3.39
19	15.00	7.18	15.00	7.93	5.17	2.48	7.26	3.82	7.40	3.55	7.40	3.89
20	15.00	7.47	15.00	8.34	4.45	2.22	6.08	3.38	6.06	3.02	6.06	3.37
21	15.00	6.79	15.00	6.94	5.95	2.69	8.33	3.86	5.38	2.44	5.38	2.49
22	15.00	7.50	15.00	8.34	5.79	2.90	7.88	4.38	6.63	3.32	6.63	3.69
23	15.00	7.50	15.00	8.33	6.65	3.33	8.55	4.76	6.79	3.39	6.79	3.77
24	15.00	7.65	15.00	7.50	6.12	3.12	8.61	4.25	5.78	2.95	5.78	2.89
25	15.00	8.15	15.00	7.98	5.16	2.80	7.02	3.73	6.31	3.44	6.31	3.35
26	15.00	7.50	15.00	8.33	6.38	3.19	9.00	5.00	5.27	2.63	5.27	2.93
27	15.55	7.44	15.55	7.66	5.60	2.68	7.63	3.75	5.76	2.75	5.76	2.83
28	15.00	7.35	15.00	8.24	5.85	2.87	7.20	3.96	6.62	3.24	6.62	3.63
29	25.00	12.19	25.00	13.88	6.07	2.96	8.43	4.68	6.74	3.28	6.74	3.78
30	15.00	7.29	15.00	7.98	6.70	2.77	7.90	4.20	5.38	2.62	5.38	2.86
31	15.00	7.77	15.00	8.38	5.55	2.88	7.36	4.11	6.08	3.15	6.08	3.39
32	15.40	7.95	15.40	7.48	5.39	2.78	7.56	3.68	5.66	2.91	5.66	2.74
33	15.00	6.33	15.00	7.15	5.71	2.41	8.05	3.83	5.84	2.04	5.84	2.78
34	15.00	8.15	15.00	8.57	5.24	2.84	7.35	4.20	5.40	2.93	5.40	3.08
35	15.20	7.72	15.20	7.64	6.19	3.14	8.17	4.11	7.12	3.62	7.12	3.57
36	15.00	8.62	15.00	9.21	5.53	3.18	7.09	4.35	6.10	3.50	6.10	3.73
37	15.50	7.56	15.50	8.07	5.81	2.34	8.11	4.22	5.91	2.89	5.91	3.08
38	15.25	7.12	15.25	7.52	5.85	2.74	7.65	3.76	6.45	3.01	6.45	3.18
39	15.00	7.90	15.00	8.93	5.36	2.82	7.36	4.38	6.20	3.26	6.20	3.69
40	15.50	8.16	15.50	8.87	5.22	2.75	6.90	3.94	5.85	3.08	5.85	3.34
Total	614.25	307.34	614.25	330.96	225.19	112.09	306.62	164.63	238.15	118.90	238.15	128.41
Average.	1.536	7.683	1.536	8.274	.5629	2.802	.7665	4.116	.5954	2.972	.5954	3.210

RYE—TABLE XXXV, continued.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE NO.	THRESHING.				MARKETING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	6.33	3.00	5.82	3.00	5.70	2.70	5.23	2.70	30.60	14.50	30.60	15.77
2	5.20	2.60	4.73	2.60	4.80	2.40	4.36	2.40	26.10	13.05	26.10	14.34
3	4.73	2.59	4.34	2.59	6.64	3.09	6.17	3.09	26.70	14.67	26.70	15.98
4	5.34	2.70	4.56	2.70	6.33	3.20	5.40	3.20	31.30	15.91	31.30	18.52
5	4.07	2.30	3.88	2.30	4.60	2.60	4.39	2.60	37.20	21.02	37.20	22.02
6	4.14	2.00	4.20	2.00	3.93	1.90	3.99	1.90	31.08	16.01	31.08	14.80
7	5.86	2.70	5.54	2.70	5.21	2.40	4.92	2.40	30.60	14.10	30.60	14.93
8	4.90	2.40	4.42	2.40	5.30	2.60	4.78	2.60	33.00	16.18	33.00	17.93
9	5.23	2.60	4.42	2.60	6.63	3.30	5.61	3.30	33.60	16.71	33.60	19.76
10	6.35	2.80	5.74	2.80	5.45	2.40	4.92	2.40	33.30	14.67	33.30	16.23
11	4.87	2.44	4.30	2.50	5.06	2.60	4.64	2.69	29.40	15.08	29.40	17.09
12	4.75	2.40	4.32	2.40	5.14	2.60	4.68	2.60	27.30	13.77	27.30	15.17
13	4.91	2.59	5.22	2.59	4.53	2.39	4.82	2.39	33.90	17.93	33.90	16.86
14	5.37	2.79	5.40	2.79	3.84	2.00	3.86	2.00	28.08	14.62	28.08	14.56
15	5.17	2.64	4.73	2.59	4.18	2.10	3.82	2.09	30.66	15.40	30.66	16.84
16	6.31	2.70	5.62	2.70	5.85	2.50	5.20	2.50	25.80	11.03	25.80	12.40
17	4.62	2.50	4.12	2.50	5.73	3.10	5.11	3.10	30.90	16.70	30.90	18.73
18	4.60	2.30	4.14	2.30	6.80	3.40	6.10	3.40	33.00	16.50	33.00	18.33
19	5.64	2.70	5.13	2.70	5.85	2.80	5.32	2.80	27.60	13.20	27.60	14.52
20	4.42	2.20	3.96	2.20	5.22	2.60	4.68	2.60	33.00	16.41	33.00	18.34
21	5.52	2.50	5.40	2.60	4.42	2.00	4.32	2.00	31.02	14.03	31.02	14.37
22	4.40	2.20	3.96	2.20	5.00	2.50	4.50	2.50	32.70	16.32	32.70	18.16
23	4.80	2.40	4.32	2.40	5.60	2.80	5.04	2.80	24.48	12.24	24.48	13.60
24	5.68	2.90	5.80	2.90	4.90	2.50	5.00	2.50	36.90	18.82	36.90	18.45
25	4.96	2.69	5.07	2.69	5.52	3.00	5.64	3.00	22.98	12.49	22.98	12.22
26	4.20	2.10	3.78	2.10	6.00	3.00	5.40	3.00	31.60	15.75	31.50	17.60
27	4.81	2.30	4.66	2.30	4.51	2.20	4.22	2.20	35.28	16.89	35.28	17.38
28	4.69	2.30	4.18	2.30	6.53	3.20	5.82	3.20	31.50	16.44	31.50	17.31
29	5.33	2.60	4.68	2.60	6.76	3.30	5.94	3.30	30.90	15.07	30.90	17.16
30	4.94	2.40	4.51	2.40	6.59	3.20	6.01	3.20	32.10	15.59	32.10	17.07
31	5.01	2.60	4.65	2.60	4.82	2.50	4.47	2.50	30.30	15.69	30.30	16.92
32	5.24	2.70	5.56	2.70	4.65	2.40	4.94	2.40	29.34	15.13	29.34	14.24
33	6.64	2.80	5.88	2.80	6.87	2.90	6.09	2.90	31.50	13.29	31.60	15.00
34	4.60	2.50	4.37	2.50	4.60	2.50	4.37	2.50	35.40	19.24	35.40	20.22
35	4.73	2.40	4.77	2.40	4.92	2.50	4.97	2.50	33.90	17.21	33.90	17.03
36	4.52	2.60	4.23	2.60	4.87	2.80	4.56	2.80	36.60	21.04	36.60	22.45
37	5.53	2.70	5.18	2.70	4.51	2.20	4.22	2.20	31.50	15.36	31.50	16.40
38	6.21	2.90	5.88	2.90	6.63	3.10	6.29	3.10	34.80	16.26	34.80	17.14
39	4.18	2.20	3.69	2.20	4.94	2.60	4.36	2.60	26.10	13.73	26.10	15.54
40	5.32	2.80	4.90	2.80	4.95	2.60	4.55	2.60	30.90	16.26	30.90	17.66
Total	204.12	101.54	190.06	101.55	213.05	106.28	197.55	106.36	1242.8	622.21	1242.8	668.94
Average	.5103	2.538	.4751	2.538	.5326	2.657	.4939	2.659	3.107	15.55	3.107	16.72

RYE—TABLE XXXV, continued.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1............	6.81	3.23	6.81	3.51	2.50	1.18	2.50	1.29	5.00	2.37	5.00	2.58
2............	3.67	1.83	3.67	2.01	2.50	1.25	2.50	1.37	5.00	2.50	5.00	2.75
3............	6.85	3.76	6.85	4.10	2.50	1.36	2.50	1.49	5.00	2.77	5.00	2.98
4............	4.90	2.47	4.90	2.90	2.50	1.26	2.50	1.48	5.00	2.52	5.00	2.96
5............	5.20	2.93	5.20	3.06	2.50	1.41	2.50	1.48	5.00	2.82	5.00	2.96
6............	5.00	2.41	5.00	2.38	2.50	1.20	2.50	1.19	5.00	2.40	5.00	2.38
7............	6.83	3.15	6.83	3.33	2.50	1.15	2.00	1.22	5.00	2.31	5.00	2.44
8............	4.00	1.96	4.00	2.17	2.50	1.22	2.50	1.35	5.00	2.45	5.00	2.71
9............	4.65	2.31	4.65	2.74	2.50	1.25	2.50	1.47	5.00	2.50	5.00	2.94
10............	4.65	2.06	4.65	2.28	2.50	1.10	2.50	1.22	5.00	2.20	5.00	2.44
11............	4.40	2.26	4.40	2.56	2.50	1.29	2.50	1.46	5.00	2.58	5.00	2.92
12............	4.00	2.02	4.00	2.23	2.50	1.26	2.50	1.39	5.00	2.52	5.00	2.78
13............	4.50	2.38	4.50	2.2[illegible]	2.50	1.32	2.50	1.24	5.00	2.65	5.00	2.49
14............	4.00	2.08	4.00	2.07	2.50	1.30	2.50	1.29	5.00	2.61	5.00	2.74
15............	2.70	1.35	2.70	1.48	2.50	1.25	2.50	1.37	5.00	2.50	5.00	2.59
16............	4.48	1.91	4.48	2.16	2.50	1.07	2.50	1.20	5.00	2.14	5.00	2.40
17............	5.60	3.03	5.60	3.39	2.50	1.35	2.50	1.52	5.00	2.70	5.00	3.04
18............	3.96	1.98	3.96	2.20	2.50	1.25	2.50	1.39	5.00	2.50	5.00	2.79
19............	4.50	2.15	4.50	2.37	2.50	1.19	2.50	1.31	5.00	2.38	5.00	2.63
20............	3.50	1.74	3.50	1.93	2.50	1.24	2.50	1.38	5.00	2.48	5.00	2.77
21............	3.30	1.49	3.30	1.53	2.50	1.13	2.50	1.15	5.00	2.26	5.00	2.31
22............	4.50	2.25	4.50	2.50	2.50	1.25	2.50	1.38	5.00	2.50	5.00	2.77
23............	4.60	2.30	4.60	2.55	2.50	1.25	2.50	1.39	5.00	2.50	5.00	2.78
24............	4.73	2.41	4.73	2.37	2.50	1.27	2.50	1.25	5.00	2.54	5.00	2.50
25............	3.85	2.09	3.85	2.04	2.50	1.35	2.50	1.33	5.00	2.71	5.00	2.67
26............	4.00	2.00	4.00	2.22	2.50	1.25	2.50	1.39	5.00	2.50	5.00	2.79
27............	5.37	2.57	5.37	2.64	2.50	1.19	2.50	1.23	5.00	2.39	5.00	2.47
28............	4.00	1.96	4.00	2.19	2.50	1.22	2.50	1.37	5.00	2.45	5.00	2.75
29............	3.75	2.80	5.75	3.19	2.50	1.22	2.50	1.89	5.00	2.45	5.00	2.79
30............	3.60	1.75	3.60	1.92	2.50	1.21	2.50	1.33	5.00	2.43	5.00	2.66
31............	6.63	3.43	6.63	3.70	2.50	1.30	2.50	1.40	5.00	2.60	5.00	2.80
32............	4.00	2.06	4.00	1.94	2.50	1.28	2.50	1.21	5.00	2.57	5.00	2.42
33............	4.18	1.76	4.18	1.99	2.50	1.05	2.50	1.19	5.00	2.11	5.00	2.38
34............	5.72	3.11	5.72	3.27	2.50	1.35	2.50	1.42	5.00	2.70	5.00	2.85
35............	5.50	2.79	5.50	2.77	2.50	1.26	2.50	1.25	5.00	2.52	5.00	2.51
38............	3.74	1.74	3.74	1.84	2.50	1.43	2.50	1.53	5.00	2.87	5.00	3.07
36............	5.13	2.94	5.13	3.14	2.50	1.22	2.50	1.30	5.00	2.44	5.00	2.60
37............	4.87	2.37	4.87	2.53	2.50	1.16	2.50	1.23	5.00	2.33	5.00	2.46
39............	3.57	1.87	3.57	2.13	2.50	1.32	2.50	1.48	5.00	2.63	5.00	2.96
40............	4.60	2.42	4.60	2.63	2.50	1.31	2.50	1.42	5.00	2.62	5.00	2.85
Total......	185.84	93.12	185.84	100.21	100.00	49.92	100.00	53.76	200.00	100.02	200.00	107.68
Average..	.4646	2.328	.4646	2.505	.250	1.248	.250	1.344	.500	2.500	.500	2.692

RYE—TABLE XXXV, continued.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE NUMBER.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STRAW.				VALUE OF GRAIN.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1....	99.49	47.16	100.22	51.66	35.40	16.78	35.40	18.24	72.79	34.50	88.65	45.70
2....	92.09	46.04	93.22	51.22	27.00	13.50	27.00	14.83	66.20	33.10	82.08	45.10
3....	95.06	52.23	96.32	57.61	24.00	13.18	24.00	14.37	60.60	33.30	80.82	48.40
4....	102.98	52.01	102.93	60.90	28.00	14.14	28.00	16.56	65.73	33.20	73.42	44.10
5....	104.71	59.15	106.21	62.84	27.95	15.79	27.95	16.53	60.53	34.20	77.23	45.70
6....	99.04	47.84	101.59	48.37	33.00	15.94	33.00	15.71	68.31	33.00	97.65	46.50
7....	97.87	45.10	99.00	48.29	31.00	14.29	31.00	15.12	73.78	34.00	94.30	46.00
8....	102.11	50.05	103.24	56.06	30.80	15.09	30.80	16.74	70.38	34.50	87.95	47.80
9....	104.41	61.89	104.43	61.43	26.07	12.97	26.07	15.34	68.54	34.10	81.09	47.70
10....	102.78	45.28	103 88	50.67	32.55	14.34	32.55	15.88	80.81	35.60	95.94	46.80
11....	96.41	49.43	97.33	56.60	28.00	14.36	28.00	16.27	65.13	33.40	97.40	45.00
12....	93.96	47.45	95.00	52.85	30.00	15.15	30.00	16.66	64.94	32.80	81.00	45.00
13....	102.04	53.98	105.21	42.34	30.00	15.87	30.00	14.92	64.07	33.90	96.88	48.20
14....	92.59	48.22	95.19	49.28	31.00	16.14	31.00	16.09	61.44	32.00	90.72	47.00
15....	97.02	48.74	98.33	54.03	29.00	14.57	29.00	15.93	66.27	33.33	83.17	45.70
16....	91.33	39.02	91.98	44.22	32.00	13.67	32.00	15.38	80.96	34.60	99.63	47.90
17....	104.25	56.35	104.84	63.55	28.00	15.13	28.00	16.98	63.45	34.30	74.25	45.00
18....	102.74	51.37	103.69	57.61	34.00	17.00	34.00	18.88	66.20	33.10	81.00	45.00
19....	99.48	47.59	100.53	52.91	32.00	15.31	32.00	16.84	67.51	32.30	85.50	45.00
20....	99.13	49.31	99.76	55.42	32.00	15.59	32.00	17.77	66.33	33.00	81.00	45.00
21....	97.14	43.95	99.30	45.97	33.00	14.93	33.00	15.27	77.35	35.00	105.84	49.00
22....	102.32	61.16	103.47	57.48	30.00	15.00	30.00	16.66	66.20	33.10	81.00	45.00
23....	96.34	48.16	97.20	64.00	27.00	13.60	27.00	15.00	70.00	35.00	81.00	45.00
24....	104.45	53.26	107.06	53.53	31.50	16.07	31.50	15.75	66.64	34.00	94.60	47.30
25....	89.07	48.41	91.16	48.48	27.00	14.67	27.00	14.36	63.29	34.40	87.98	46.80
26....	98.83	49.41	100.43	55.79	30.00	15.00	30.00	16.66	65.80	32.90	81.00	45.00
27....	102.21	48.90	103.97	51.21	36.05	17.21	36.05	17.75	73.15	35.00	96.83	47.70
28....	101.80	49.90	101.93	56.00	30.00	14.70	30.00	16.48	66.91	32.80	81.90	45.00
29....	112.97	56.10	113.86	63.25	32.00	15.59	32.00	17.77	66.42	32.40	81.00	45.00
30....	100.83	48.99	102.02	54.26	29.65	14.39	29.65	15.77	69.01	33.50	87.42	46.50
31....	101.10	52.38	102.20	57.09	33.20	17.20	33.20	18.55	66.97	34.70	83.34	46.00
32....	95.38	49.16	98.16	47.65	37.00	19.07	37.00	17.96	65.38	33.70	97.44	47.30
33....	103 36	43.19	104.16	49.60	33.83	14.28	33.83	16.11	79.63	33.60	99.54	47.40
34....	103.94	56.43	105.59	60.33	35.30	19.18	35.30	20.17	62.19	33.80	83.12	47.50
35....	104.92	63.25	106.99	53.76	36.35	18.45	36.35	18.26	67.77	34.40	90.34	45.40
36....	105.41	60.58	106.37	65.25	23.70	13.62	23.70	14.54	63.11	35.70	74.65	45.80
37....	99.08	47.84	100.74	52.45	38.60	18.83	38.60	20.10	70.11	34.20	91.39	47.60
38....	106.28	49.20	106.41	58.42	32.13	15.01	32.13	15.82	73.62	34.40	91.35	45.00
39....	92.90	48.69	93.83	65.86	30.00	15.79	30.00	17.85	63.65	38.50	77.28	46.00
40....	96.93	51.01	97.79	55.88	30.75	16.18	30.75	17.57	66.12	34.80	80.50	46.00
Total.	3993.75	1997.38	4045.62	2178.12	1238.83	617.84	1238.83	663.44	2717.29	1353.1	3477.20	1848.9
Av..	9.984	49.94	10.114	54.45	3.097	15.45	3.097	16.59	6.793	33.80	8.693	46.23

RYE—TABLE XXXV, continued.

Cost of production and value of products of 400 acres of rye in 10 acre lots.

OFFICE NUMBER.	TOTAL VALUE OF PRODUCTS RAISED.				PROFIT.				LOSS.			
	Total value per acre and bushel.				*Profit per acre and bushel.*				*Loss per acre and bushel.*			
	Acre 1896 $	Bush 1896 $	Acre 5 years $	Bush 5 years $	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1........	108.19	5.128	124.06	6.394	8.70	4.12	23.83	12.28	......	......	......	......
2........	93.20	4.660	109.08	5.993	1.11	.56	15.86	8.71	......	......	......	......
3........	84.60	4.648	104.82	6.277	......	......	8.50	5.16	10.46	6.75	......	......
4........	93.73	4.734	101.42	6.066	......	......	......	......	9.25	4.67	1.61	.24
5........	88.48	4.999	105.18	6.223	......	......	......	......	16.23	9.16	1.03	.61
6........	101.31	4.894	130.65	6.221	2.27	1.10	29.06	13.84	......	......	......	......
7........	104.[illegible]	4.829	125.30	6.112	6.91	3.[illegible]	26.30	12.83	......	......	......	......
8........	101.18	4.959	118.75	6.454	......	......	15.51	8.48	.93	.46	......	......
9........	94.61	4.707	107.16	6.304	......	......	2.73	1.61	9.80	4.82	......	......
10........	113.36	4.994	128.49	6.268	10.58	4.66	24.61	12.01	......	......	......	......
11........	93.13	4.776	125.40	6.127	......	......	28.07	4.67	3.28	1.67	......	......
12........	94.94	4.795	111.00	6.166	.98	.50	15.92	8.81	......	......	......	......
13........	94.07	4.977	126.88	6.312	......	......	21.67	10.78	7.97	4.21	......	......
14........	92.44	4.814	121.72	6.309	......	......	26.53	13.81	.15	.08	......	......
15........	95.27	4.787	112.17	6.163	....	......	13.84	7.60	1.75	.8[illegible]	......	......
16........	112.96	4.827	131.63	6.328	21.63	9.25	39.65	19.06	......	......	......	......
17........	91.45	4.943	102.25	6.198	......	......	......	......	12.80	6.92	2.59	1.57
18........	100.20	5.010	115.00	6.388	......	......	11.31	6.27	2.54	1.27	......	......
19........	99.51	4.761	117.50	6.184	.03	.02	16.97	8.93	......	......	......	......
20........	98.33	4.892	113.00	6.277	......	......	13.24	7.35	.80	.39	......	......
21........	110.35	4.993	138.84	6.427	13.21	5.98	39.54	18.30	......	......	......	......
22........	96.20	4.810	111.00	6.166	......	......	7.53	4.18	6.12	3.06	......	......
23........	97.00	4.850	108.00	6.000	.66	.34	10.80	6.00	......	......	......	......
24........	98.14	5.007	126.10	6.305	......	......	19.04	9.52	6.31	3.19	......	......
25........	90.29	4.907	114.98	6.116	1.22	.66	23.82	12.68	......	......	......	......
26........	95.80	4.790	111.00	6.166	......	......	10.57	5.87	3.03	1.51	......	......
27........	109.20	5.224	132.88	6.545	6.99	3.34	28.91	14.24	......	......	......	......
28........	96.91	4.750	111.90	6.148	......	......	9.97	5.48	4.89	2.40	......	......
29........	98.42	4.799	113.00	6.277	......	......	......	......	14.55	7.11	.86	.48
30........	98.66	4.769	117.07	6.227	......	......	15.05	8.01	2.17	1.10	......	......
31........	100.17	5.190	116.54	6.45[illegible]	......	......	14.34	7.46	.93	.48	......	......
32........	102.38	5.277	134.44	6.526	7.00	3.61	36.28	17.61	......	......	......	......
33........	113.46	4.788	133.37	6.351	10.10	4.69	29.21	13.91	......	......	......	......
34........	97.49	5.298	118.42	6.767	......	......	12.83	7.34	6.45	3.45	......	......
35........	104.12	5.285	126.69	6.366	......	......	19.70	9.90	.80	.40	......	......
36........	86.81	4.932	98.35	6.034	......	......	......	......	18.60	11.26	8.02	4.91
37........	108.71	5.303	129.99	6.770	9.63	5.19	29.25	15.25	......	......	......	......
38........	105.75	4.941	123.48	6.082	.47	.21	17.07	8.40	......	......	......	......
39........	93.65	4.929	107.28	6.385	.76	.40	18.45	7.99	......	......	......	......
40........	96.67	5.098	111.25	6.357	......	......	13.46	7.69	.06	.03	......	......
Total..	3956.12	197.094	4716.03	251.234	102.24	47.82	686.42	342.03	139.87	74.26	14.01	7.81
Average	9.890	.493	11.790	.628	2.556	1.195	1.716	8.551	.349	1.856	.0035	.0020

TABLE XXXVI.—SUMMARY OF TABLE XXXV.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 400 acres of rye and the average cost per acre and bushel. The total value of products of 400 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	400 acres, 1896.	One acre.	Bush.	400 acres, 5 years.	One acre.	One Bush.
	$	$	Cts.	$	$	Cts.
Plowing	430.89	1.077	5.40	430.89	1.077	5.81
Harrowing and seeding	235.46	.588	2.95	235.46	.588	3.16
Cutting	103.98	.260	1.30	103.98	.260	1.40
Fertilizing	614.25	1.536	7.68	614.25	1.536	8.27
Seed	225.19	.563	2.80	306.62	.767	4.12
Shocking and stacking	238.15	.595	2.97	238.15	.595	3.21
Threshing	204.12	.510	2.64	190.06	.475	2.54
Marketing	213.50	.533	2.66	197.55	.494	2.66
Interest	1242.82	3.107	15.56	1242.82	3.107	16.72
Wear and tear	185.84	.465	2.33	185.84	.465	2.50
Taxes	100.00	.250	1.25	100.00	.250	1.35
Other expenses	200.00	.500	2.50	200.00	.500	2.69
Total	3993.76	9.984	49.94	4045.62	10.114	54.45

Value of products.

Value of grain	2717.29	6.793	33.82	3477.20	8.693	46.22
Value of straw	1238.83	3.097	15.45	1238.83	3.097	16.59
Total value	3956.12	9.890	49.27	4716.03	11.790	62.81

Profit and loss.

Profit	102.24	2.556	11.95	686.42	1.716	8.55
Loss	139.87	3.497	18.56	14.01	.035	.19
Balance profit and loss	37.63	.941	6.61	672.41	1.681	8.35

TABLE XXXVII.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF RYE.

The data upon which the calculations in the tables on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value or Cost," as the case may be. In Section 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	Bush.
			$	$	Cts.
1	Plowing	1812 hours at 24 cents	434.88	1.087	5.81
2	Harrowing, etc.	640 hours at 24 cents	153.60	.384	2.05
3	Seeding	344 hours at 24 cents	82.56	.206	1.10
4	Cutting	384 hours at 24 cents	92.16	.230	1.23
5	Shocking	464 hours at 11.8 cents	54.75	.137	.73
6	Stacking, man and team	492 hours at 24 cents	118.08	.295	1.58
7	Stacking, extra man	492 hours at 11.8 cents	58.06	.145	.77
8	Threshing, labor	1049 hours at 11.8 cents	123.78	.309	1.65
9	Threshing, machine	7491 bush. at 1 cent	74.91	.187	1.00
10	Marketing	832 hours at 24 cents	199.68	.499	2.66
11	Seed	658 bush. at 50 cents	329.00	.823	4.39
12	Taxes	400 acres at 26 cents	104.00	.260	1.39
13	Fertilizing	1000 loads manure	300.00	.750	4.00
14	Other expenses	400 acres at 50 cents	200.00	.500	2.67
15	Depreciation	1860.00 dollars at 10 per cent.	186.00	.465	2.49
	Annual investment		2511.46	6.279	33.52
16	Interest, machinery	1860.00 dollars at 6 per cent.	111.60	.279	1.49
17	Interest, an. investment	2511.45 dollars at 6 per cent.	150.69	.376	2.01
18	Interest, land	16880.00 dollars at 6 per cent.	1012.80	2.532	13.52
	Total		3786.55	9.466	50.54

Total investment, $21,257.46. Average investment per acre, $53.14. Team work, 460.2 days. Labor, 650.7 days. Value per acre of land, $42.20.

2. *Value of products.*

		400 acres.	One acre.	Bush.
1	7491 bushels rye at 46.2 cents, av. 6 yrs	3460.84	8.652	46.20
2	400 acres straw at $2.00	800.00	2.000	10.68
	Total	4260.84	10.652	56.88

3. *Surplus Value.*

	400 acres.	One acre.	Bush.
Value above costs (profits)	474.29	11.86	14.68

Equivalent to 2.23 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising rye.

		400 acres.	One acre.	Bush.
Annual investment		2511.46	62.79	33.52
Machinery	$1,860.00 at 12 per cent.	223.20	5.58	2.98
Annual investment	2,511.46 at 12 per cent.	301.37	7.53	4.03
Total expenses less rent		3036.03	75.90	40.53
Surplus credited to land		*1224.81	30.62	16.35
Total		4260.84	106.52	56.83

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* Capitalized at 12 per cent. equivalent to $10,206.75 or $25.51 per acre. This is $16.69 per acre below the value reported by the farmers.

TABLE XXXVIII.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF RYE.

The data upon which the calculations in the table on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of Product" is shown in Section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and the necessary profit at 12 per cent. on same and upon the value of machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	Per bushel.
			$	$	Cts.
1	Plowing	1812 hours at 11.8 cents	213.81	.534	2.85
2	Harrowing, etc.	640 hours at 11.8 cents	75.52	.189	1.01
3	Seeding	344 hours at 11.8 cents	40.59	.101	.54
4	Cutting	384 hours at 11.8 cents	45.33	.113	.61
5	Shocking	464 hours at 11.8 cents	54.75	.137	.73
6	Stacking	984 hours at 11.8 cents	116.12	.290	1.55
7	Threshing	1049 hours at 11.8 cents	123.78	.309	1.65
8	Threshing	7491 bush. at 1 cent	74.91	.188	1.00
9	Marketing	832 hours at 11.8 cents	98.18	.246	1.31
10	Seed	658 bush. at 50 cents	329.00	.822	4.39
11	Taxes	400 acres at 26 cents	104.00	.260	1.39
12	Maintenance of horses	400 acres at 92 cents	368.00	.920	4.91
13	Fertilizing	1000 loads manure	300.00	.750	4.00
14	Other expenses	400 acres at 50 cents	200.00	.500	2.67
15	Depreciation, machinery	1,860.00 dollars at 10 per cent.	186.00	.465	2.49
16	Depreciation, horses	584.00 dollars at 10 per cent.	58.40	.146	.78
	Annual investment		2388.39	5.970	31.88
17	Interest on machinery	1,860.00 dollars at 6 per cent.	111.60	.279	1.49
18	Interest, horses	584.00 dollars at 6 per cent.	35.00	.088	.47
19	Interest, an. investment	2,388.39 dollars at 6 per cent.	143.30	.358	1.91
20	Interest, land	16,880.00 dollars at 6 per cent.	1012.80	2.532	13.52
	Total		3691.09	9.227	49.28

Total investment, $21,712.39. Average investment per acre $54.28. Team work, 450.2 days. Labor, 650.7 days. Value per acre of land, $42.20.

2. *Value of products.*

1	7491 bushels rye at 46.2 cents, av. 6 years	3460.84	8.652	46.20
2	400 acres straw at $2.00	800.00	2.000	10.68
	Total value	4260.84	10.652	56.88

3. *Surplus Value.*

Value above costs (profit)	569.75	14.25	7.60

Equivalent to 2.62 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising rye.

Annual investment		2388.39	5.970	31.88
Machinery	$1,860.00 at 12 per cent.	223.20	.558	2.98
Horses	584.00 at 12 per cent.	70.00	.175	.93
Annual investment	2,388.39 at 12 per cent.	286.61	.717	3.83
Total expenses less rent		2968.20	7.420	39.62
Surplus credited to land		*1292.64	3.232	17.26
Total		4260.84	10.652	56.88

*Capitalized at 12 per cent. equivalent to $10,686.00 or $26.71 per acre. This is $15.49 per acre below the value reported by the farmers.

In relation to the cost of producing 400 acres of rye as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table 35, covering six pages, the cost per ten acres, the total cost of 400 acres and the average cost per acre are presented. Table 36 is made up of the totals of table 35. Table 37 is a more complete analysis of table 35, including besides the expenses in that table, interest on the value of the machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are with a few exceptions similar to the expenses of other capital used and should, therefore, be treated accordingly. Another analysis of the cost of production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table 38 and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost per acre and bushel of growing rye as computed from table XXXV., is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.534	2.85
Harrowing, etc.	.189	1.01
Seeding	.101	.54
Cutting	.113	.61
Shocking	.137	.73
Stacking	.290	1.55
Threshing, labor	.309	1.65
Threshing, machine	.188	1.00
Marketing	.246	1.31
Seed	.822	4.39
Taxes	.260	1.39
Maintenance, horses	.920	4.91
Fertilizing	.760	4.06
Other expenses	.500	2.67
Depreciation, machinery	.465	2.49
Depreciation, horses	.146	.78
Annual investment	5.970	31.88
Interest, machinery	.279	1.49
Interest, horses	.088	.47
Interest, annual investment	.358	1.91
Interest, land	2.532	13.52
Total	9.227	49.28

BARLEY—TABLE XXXIX.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

OFFICE NO.	PLOWING.				HARROWING.				CUTTING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	8.72	2.61	8.72	2.79	5.66	1.66	5.56	1.77	2.35	.70	2.35	.75
2	10.74	3.60	10.74	3.70	5.68	1.90	5.68	1.96	2.42	.81	2.42	.83
3	10.41	3.49	10.41	3.75	6.54	2.19	6.54	2.37	2.47	.84	2.47	.89
4	11.84	3.78	11.84	4.23	6.96	2.22	6.96	2.49	2.62	.84	2.62	.93
5	11.01	3.49	11.01	3.59	5.80	1.83	5.80	1.89	2.37	.75	2.37	.78
6	11.28	3.44	11.28	3.47	5.81	2.37	5.81	1.78	2.80	.85	2.80	.86
7	9.51	3.02	9.51	3.16	5.44	1.72	5.44	1.80	2.28	.72	2.28	.73
8	10.75	3.36	10.75	3.62	7.06	2.21	7.06	2.38	2.72	.85	2.72	.91
9	10.21	2.96	10.21	3.20	5.95	1.72	5.95	1.86	2.66	.77	2.66	.83
10	9.67	2.84	9.67	3.05	5.64	1.66	5.64	1.78	2.55	.75	2.55	.80
11	10.56	3.50	10.56	3.68	5.32	1.76	5.32	1.86	2.70	.89	2.70	.94
12	11.25	3.76	11.25	3.85	5.58	1.86	5.58	1.91	2.53	.84	2.53	.86
13	10.20	3.18	10.20	3.23	6.40	2.00	6.40	2.03	2.75	.86	2.75	.88
14	10.32	3.13	10.32	3.21	5.40	1.64	5.40	1.69	2.29	.69	2.29	.72
15	11.05	3.65	11.05	3.74	5.85	1.92	5.85	1.98	2.77	.91	2.77	.94
16	9.67	2.82	9.67	2.87	4.96	1.44	4.96	1.48	2.29	.67	2.29	.68
17	13.14	4.22	13.14	4.68	6.20	1.98	6.20	2.22	2.99	.95	2.99	1.07
18	10.79	3.47	10.79	3.66	6.72	2.15	6.72	2.36	2.42	.77	2.42	.89
19	11.85	3.99	11.85	4.03	6.17	1.90	6.17	2.09	2.80	.86	2.80	.95
20	11.36	3.52	11.36	3.72	5.85	1.82	5.85	1.91	2.77	.86	2.77	.90
21	11.44	3.01	11.44	3.15	5.04	1.32	5.04	1.39	2.57	.68	2.57	.70
22	11.85	3.88	11.85	4.04	6.30	2.05	6.30	2.25	2.65	.86	2.65	.90
23	11.90	4.12	11.90	4.16	6.40	2.21	6.40	2.24	2.62	.91	2.62	.92
24	10.46	3.23	10.46	3.28	4.99	1.54	4.99	1.57	2.39	.74	2.39	.75
25	9.98	3.11	9.98	3.21	5.22	1.62	5.22	1.68	2.59	.81	2.59	.81
26	10.71	3.57	10.71	3.68	5.75	1.91	5.75	1.98	2.50	.83	2.50	.85
27	10.10	2.89	10.10	3.05	6.41	1.84	6.41	1.96	2.55	.73	2.55	.78
28	11.02	3.60	11.02	3.75	6.37	2.08	6.37	2.17	2.72	.88	2.72	.92
29	10.12	3.24	10.12	3.46	6.03	1.93	6.03	2.07	2.77	.89	2.77	.95
30	11.28	3.14	11.28	3.49	6.34	1.77	6.34	1.96	2.49	.69	2.49	.77
31	11.33	3.26	11.33	3.57	6.38	1.82	6.38	2.02	2.50	.72	2.50	.78
32	10.32	3.34	10.32	3.23	5.40	1.64	5.40	1.69	2.67	.86	2.67	.83
33	10.87	3.19	10.87	3.61	6.50	1.91	6.50	2.16	2.75	.80	2.75	.92
34	11.97	3.44	11.97	3.75	5.85	1.69	5.85	1.84	2.66	.76	2.66	.83
35	11.42	3.09	11.42	3.43	5.60	1.53	5.60	1.68	2.84	.78	2.84	.86
36	11.16	3.54	11.16	3.79	6.20	1.96	6.20	2.11	2.80	.89	2.80	.96
37	10.32	3.14	10.32	3.53	5.13	1.56	5.13	1.74	2.50	.75	2.50	.85
38	10.81	3.08	10.81	3.27	5.40	1.56	5.40	1.64	2.64	.76	2.64	.80
39	10.24	3.17	10.24	3.47	6.86	2.12	6.86	2.33	2.90	.90	2.90	.99
40	9.26	2.73	9.26	3.12	5.49	1.62	5.49	1.66	2.34	.69	2.34	.79
Total	430.69	133.59	430.89	141.26	236.36	73.67	236.36	77.79	105.00	32.11	105.00	34.10
Average	1.077	3.339	1.077	3.531	.5909	1.842	.5909	1.949	.2625	.803	.2625	.852

BARLEY—TABLE XXXIX, continued.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

OFFICE No.	FERTILIZING.				SEED.				SHOCKING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1..........	23.10	6.91	23.10	7.36	6.19	1.85	8.71	2.78	5.58	1.67	5.58	1.78
2..........	25.00	8.39	25.00	8.62	6.27	2.10	9.92	3.42	5.36	1.79	5.36	1.85
3..........	25.00	8.39	25.00	9.03	5.66	1.90	8.72	3.15	4.56	1.56	4.56	1.66
4..........	25.00	7.96	25.00	8.93	6.12	1.94	9.10	3.25	6.13	1.96	6.13	2.18
5..........	25.00	7.94	25.00	8.14	7.15	2.27	9.35	3.04	5.57	1.77	5.57	1.82
6..........	25.00	7.63	25.00	7.67	6.00	1.84	9.76	2.99	6.56	2.00	6.56	2.02
7..........	25.40	8.07	25.40	8.43	5.78	1.83	8.19	2.72	4.71	1.50	4.71	1.59
8..........	26.10	8.16	26.10	8.79	5.88	1.84	8.94	3.01	5.86	1.83	5.86	1.98
9..........	27.80	8.06	27.80	8.69	6.09	1.77	9.43	2.95	6.51	1.89	6.51	2.03
10..........	26.80	7.86	26.80	8.46	5.80	1.70	9.00	2.84	5.45	1.59	5.45	1.74
11..........	25.00	8.28	25.00	8.72	5.77	1.91	9.24	3.22	6.09	2.01	6.09	2.12
12..........	25.00	8.36	25.00	8.56	6.20	2.07	9.70	3.32	5.50	1.84	5.50	1.88
13..........	25.00	7.79	25.00	7.91	5.50	1.72	9.21	2.91	6.25	1.96	6.25	1.98
14..........	25.00	7.57	25.00	7.79	4.90	1.48	9.88	2.82	5.35	1.63	5.35	1.66
15..........	25.00	8.25	25.00	8.49	6.44	2.12	10.23	3.47	6.48	2.13	6.48	2.19
16..........	25.00	7.26	25.00	7.42	5.96	1.74	9.14	2.71	4.28	1.25	4.28	1.27
17..........	25.00	8.02	25.00	8.89	5.88	1.88	9.28	3.30	7.08	2.27	7.08	2.53
18..........	25.00	8.04	25.00	8.51	6.13	1.97	9.68	3.29	6.10	1.96	6.10	2.07
19..........	25.00	7.76	25.00	8.50	5.62	1.71	8.80	2.99	7.40	2.29	7.40	2.52
20..........	25.00	7.74	25.00	8.18	5.84	1.81	13.64	4.46	6.06	1.88	6.06	1.98
21..........	25.00	6.58	25.00	6.89	6.20	1.63	9.30	2.57	5.38	1.41	5.38	1.49
22..........	25.00	8.19	25.00	8.53	6.62	2.17	10.07	3.43	6.63	2.17	6.63	2.26
23..........	25.00	8.65	25.00	8.74	6.44	2.23	10.12	3.54	6.79	2.35	6.79	2.37
24..........	25.40	7.84	25.40	7.96	5.56	1.71	9.06	2.81	5.78	1.79	5.78	1.82
25..........	25.00	7.80	25.00	8.04	6.17	1.93	9.81	3.16	6.31	1.97	6.31	2.04
26..........	25.00	8.34	25.00	8.59	6.16	2.05	9.68	3.32	5.27	1.75	5.27	1.81
27..........	25.70	7.36	25.70	7.84	6.29	1.79	9.90	3.02	5.76	1.65	5.76	1.76
28..........	25.00	8.17	25.00	8.60	5.84	1.91	9.24	3.14	6.62	2.16	6.62	2.25
29..........	25.00	8.02	25.00	8.64	6.53	2.09	10.18	3.48	6.74	2.17	6.74	2.30
30..........	24.50	6.79	24.50	7.59	6.20	1.73	9.53	2.95	5.38	1.49	5.38	1.67
31..........	24.90	7.16	24.90	7.84	5.88	1.69	8.80	2.76	6.08	1.74	6.08	1.91
32..........	25.65	8.31	25.65	8.01	6.31	2.05	10.07	3.14	5.66	1.83	5.66	1.77
33..........	26.70	7.86	26.70	8.87	6.30	1.86	9.45	3.13	5.84	1.72	5.84	1.94
34..........	27.40	7.87	27.40	8.58	5.74	1.65	8.98	2.81	5.40	1.56	5.40	1.68
35..........	25.30	6.86	25.30	7.69	5.60	1.52	8.86	2.66	7.12	1.92	7.12	2.13
36..........	27.80	8.83	27.80	9.45	6.60	2.09	9.81	3.34	6.10	1.94	6.10	2.07
37..........	25.75	7.84	25.75	8.78	6.30	1.92	9.55	3.27	5.91	1.80	5.91	2.02
38..........	24.40	6.98	24.40	7.42	6.09	1.75	9.51	2.89	6.45	1.85	6.45	1.97
39..........	25.00	7.74	25.00	8.48	6.17	1.92	9.24	3.13	6.20	1.92	6.20	2.10
40..........	25.60	7.56	25.60	8.62	5.74	1.69	8.68	2.93	5.85	1.73	5.85	1.97
Total..	1013.30	313.18	1013.30	331.56	241.82	74.83	378.92	124.12	238.15	73.69	238.15	78.16
Average	2.533	7.829	2.533	8.298	.6045	1.871	.947	3.103	.5954	1.842	.5954	1.954

Barley—Table XXXIX, continued.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

Office No.	Threshing.				Marketing.				Interest.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	7.34	2.20	6.90	2.20	7.51	2.25	7.06	2.25	30.60	9.16	30.60	9.74
2	7.16	2.40	6.96	2.40	6.75	2.30	6.67	2.30	26.10	8.76	26.10	9.09
3	6.85	2.29	6.37	2.29	7.45	2.50	6.92	2.50	26.70	8.96	26.70	9.64
4	7.22	2.30	6.44	2.30	8.16	2.60	7.28	2.60	31.30	9.96	31.30	11.13
5	5.98	1.90	5.83	1.90	6.93	2.20	6.75	2.20	37.20	11.82	37.20	12.11
6	5.90	1.79	5.86	1.79	5.24	1.59	5.21	1.59	31.08	9.47	31.08	9.54
7	6.30	2.00	6.02	2.00	6.96	2.20	6.62	2.20	30.60	9.71	30.60	10.19
8	6.72	2.10	6.24	2.10	7.36	2.30	6.83	2.30	33.00	10.31	33.00	11.11
9	6.38	1.85	5.92	1.85	8.80	2.55	8.16	2.55	33.60	9.74	33.60	10.59
10	7.50	2.20	6.97	2.20	7.16	2.10	6.65	2.10	33.30	9.77	33.30	10.61
11	6.94	2.30	6.60	2.30	7.25	2.40	6.89	2.36	29.40	9.73	29.40	10.24
12	6.67	2.20	6.42	2.20	6.28	2.10	6.13	2.10	27.30	9.13	27.30	9.35
13	6.42	2.00	6.32	2.00	6.74	2.09	6.63	2.09	33.90	10.56	33.90	10.72
14	7.92	2.40	7.70	2.40	6.27	1.90	6.09	1.90	28.08	8.49	28.08	8.75
15	7.27	2.39	7.08	2.40	5.75	1.89	5.60	1.90	30.66	10.12	30.66	10.39
16	7.54	2.20	7.41	2.20	6.86	2.00	6.74	2.00	25.80	7.52	25.80	7.66
17	7.80	2.50	7.02	2.50	8.42	2.70	7.58	2.70	30.90	9.91	30.90	10.99
18	6.84	2.19	6.46	2.19	9.64	3.09	9.11	3.09	33.00	10.61	33.00	11.23
19	7.73	2.40	7.05	2.40	8.69	2.69	7.93	2.69	27.60	8.57	27.60	9.33
20	6.78	2.09	6.42	2.09	8.40	2.60	7.95	2.60	33.00	10.21	33.00	10.79
21	7.60	2.00	7.26	2.00	5.70	1.50	5.44	1.50	31.02	8.17	31.20	8.54
22	6.71	2.20	6.44	2.20	6.40	2.09	6.15	2.09	32.70	10.70	32.70	11.16
23	6.65	2.30	6.58	2.30	7.22	2.50	7.15	2.50	24.48	8.47	24.48	8.55
24	7.45	2.30	7.34	2.30	7.45	2.30	7.34	2.30	36.90	11.39	36.90	11.69
25	6.42	2.00	6.22	2.00	7.06	2.20	6.84	2.20	22.98	7.16	22.98	7.39
26	6.30	2.10	6.11	2.10	7.20	2.40	6.98	2.40	31.60	10.50	31.60	10.82
27	7.70	2.20	7.21	2.20	5.60	1.60	5.24	1.60	35.28	10.09	35.28	10.76
28	7.04	2.30	6.76	2.30	8.26	2.70	7.93	2.70	31.50	10.29	31.60	10.71
29	7.17	2.30	6.74	2.30	9.36	3.00	8.79	3.00	30.90	9.90	30.90	10.55
30	7.22	2.00	6.46	2.00	9.02	2.50	8.07	2.50	32.10	8.89	32.10	9.94
31	6.61	1.90	6.04	1.90	7.65	2.20	6.99	2.20	30.30	8.71	30.30	9.53
32	6.80	2.20	7.04	2.20	6.50	2.10	6.72	2.10	29.34	9.49	29.34	9.17
33	6.80	2.00	6.02	2.00	8.[illegible]	2.40	7.22	2.40	31.50	9.27	31.50	10.46
34	7.31	2.10	6.59	2.10	7.65	2.20	7.01	2.20	3 .40	10.17	35.40	11.09
35	8.12	2.20	7.32	2.20	6.64	1.80	5.99	1.80	33.90	9.18	33.90	10.18
36	6.62	2.10	6.17	2.10	8.19	2.60	7.66	2.60	36.60	11.62	36.60	12.46
37	6.58	2.00	5.86	2.00	6.58	2.00	5.86	2.00	31.50	9.57	31.50	10.75
38	8.38	2.40	7.89	2.40	9.07	2.60	8.56	2.60	34.80	9.97	34.80	10.58
39	6.46	2.00	5.90	2.00	7.43	2.30	6.78	2.30	26.10	8.09	26.10	8.85
40	6.78	2.00	5.94	2.00	7.46	2.20	6.53	2.20	30.90	9.12	30.90	10.41
Total	279.87	86.30	263.88	86.31	295.19	91.24	278.05	91.21	1241.82	383.46	1241.82	406.51
Average	.6997	2.157	.6597	2.158	.7379	2.281	.6951	2.780	3.105	9.581	3.105	10.16

BARLEY—TABLE XXXIX, continued.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	6.81	2.04	6.81	2.16	2.50	.75	2.50	.79	5.00	1.50	5.00	1.58
2	3.67	1.23	3.67	1.26	2.50	.83	2.50	.86	5.00	1.67	5.00	1.73
3	6.85	2.29	6.85	2.47	2.50	.83	2.50	.90	5.00	1.67	5.00	1.81
4	4.90	1.66	4.90	1.76	2.50	.79	2.50	.89	5.00	1.59	5.00	1.79
5	5.20	1.65	5.20	1.69	2.50	.79	2.50	.81	5.00	1.59	5.00	1.62
6	5.00	1.52	5.00	1.53	2.50	.76	2.50	.76	5.00	1.53	5.00	1.53
7	6.83	2.17	6.83	2.26	2.50	.80	2.50	.83	5.00	1.59	5.00	1.66
8	4.00	1.25	4.00	1.34	2.50	.78	2.50	.84	5.00	1.56	5.00	1.68
9	4.65	1.35	4.65	1.45	2.50	.72	2.50	.77	5.00	1.44	5.00	1.54
10	4.65	1.36	4.65	1.47	2.50	.73	2.50	.78	5.00	1.46	5.00	1.57
11	4.40	1.45	4.40	1.63	2.50	.83	2.50	.88	5.00	1.66	5.00	1.75
12	4.00	1.34	4.00	1.37	2.50	.84	2.50	.86	5.00	1.68	5.00	1.72
13	4.50	1.40	4.50	1.42	2.50	.77	2.50	.79	5.00	1.56	5.00	1.59
14	4.00	1.21	4.00	1.24	2.50	.76	2.50	.77	5.00	1.53	5.00	1.55
15	2.70	.89	2.70	.91	2.50	.82	2.50	.85	5.00	1.64	5.00	1.70
16	4.48	1.31	4.48	1.33	2.50	.73	2.50	.74	5.00	1.46	5.00	1.48
17	5.60	1.79	5.60	1.99	2.50	.80	2.50	.88	5.00	1.60	5.00	1.76
18	3.96	1.28	3.96	1.34	2.50	.80	2.50	.85	5.00	1.64	5.00	1.71
19	4.50	1.39	4.50	1.53	2.50	.77	2.50	.85	5.00	1.55	5.00	1.70
20	3.50	1.08	3.50	1.14	2.50	.77	2.50	.81	5.00	1.56	5.00	1.63
21	3.30	.87	3.30	.91	2.50	.65	2.50	.68	5.00	1.31	5.00	1.37
22	4.50	1.47	4.50	1.54	2.50	.82	2.50	.85	5.00	1.65	5.00	1.70
23	4.60	1.60	4.60	1.61	2.50	.87	2.50	.87	5.00	1.74	5.00	1.74
24	4.73	1.46	4.73	1.48	2.50	.77	2.50	.78	5.00	1.54	5.00	1.56
25	3.85	1.19	3.85	1.24	2.50	.77	2.50	.80	5.00	1.55	5.00	1.61
26	4.00	1.34	4.00	1.37	2.50	.83	2.50	.86	5.00	1.67	5.00	1.73
27	5.37	1.53	5.37	1.63	2.50	.71	2.50	.76	5.00	1.43	5.00	1.53
28	4.00	1.30	4.00	1.36	2.50	.81	2.50	.85	5.00	1.63	5.00	1.71
29	5.75	1.84	5.75	1.97	2.50	.80	2.50	.84	5.00	1.60	5.00	1.68
30	3.60	1.00	3.60	1.12	2.50	.69	2.50	.77	5.00	1.38	5.00	1.54
31	6.63	1.91	6.63	2.08	2.50	.72	2.50	.78	5.00	1.44	5.00	1.56
32	4.00	1.29	4.00	1.25	2.50	.81	2.50	.78	5.00	1.62	5.00	1.57
33	4.18	1.23	4.18	1.38	2.50	.73	2.50	.83	5.00	1.47	5.00	1.67
34	5.72	1.64	5.72	1.79	2.50	.71	2.50	.78	5.00	1.43	5.00	1.57
35	5.50	1.49	5.50	1.65	2.50	.67	2.50	.75	5.00	1.35	5.00	1.50
36	5.13	1.63	5.13	1.74	2.50	.79	2.50	.85	5.00	1.59	5.00	1.71
37	4.87	1.48	4.87	1.66	2.50	.75	2.50	.86	5.00	1.51	5.00	1.71
38	3.74	1.07	3.74	1.14	2.50	.72	2.50	.76	5.00	1.44	5.00	1.52
39	3.57	1.10	3.67	1.21	2.50	.77	2.50	.84	5.00	1.54	5.00	1.68
40	4.60	1.36	4.60	1.55	2.50	.73	2.50	.83	5.00	1.46	5.00	1.66
Total....	185.84	57.36	185.84	60.86	100.00	30.79	100.00	32.62	200.00	61.81	200.00	65.42
Average..	.4646	1.434	.4646	1.521	.250	.769	.250	.815	.500	1.545	.500	1.635

BARLEY—TABLE XXXIX, continued.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

Office Number.	Total Cost of Raising Product.				Value of Straw.				Value of Grain.			
	Total cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1.....	111.26	33.80	112.89	35.95	30.05	8.99	30.05	9.57	99.86	29.9	131.88	42.0
2.....	106.64	35.78	110.02	37.93	35.00	11.74	35.00	12.08	83.14	27.9	127.89	44.1
3.....	109.99	36.91	112.04	40.44	34.00	11.41	34.00	12.27	84.33	28.3	120.77	43.6
4.....	117.75	37.60	119.07	42.52	32.00	10.19	32.00	11.43	96.08	30.6	121.80	43.5
5.....	119.71	38.00	121.58	39.59	39.75	12.61	39.75	12.94	92.92	29.5	136.08	44.0
6.....	112.17	34.79	115.86	35.53	38.00	11.58	38.00	11.65	93.80	28.6	144.74	44.4
7.....	111.28	35.33	113.10	37.57	42.75	13.57	42.75	14.20	95.76	30.4	131.23	43.6
8.....	116.95	36.56	119.00	40.06	41.45	12.95	41.45	13.95	94.08	29.4	132.76	44.7
9.....	120.15	34.81	122.39	38.22	40.50	11.74	40.50	12.62	100.55	29.0	143.68	44.9
10.....	116.02	34.02	118.18	37.28	42.25	12.39	42.25	13.32	98.89	29.0	142.65	45.0
11.....	110.93	36.72	113.70	39.60	35.00	11.59	35.00	12.19	83.05	27.6	126.28	44.0
12.....	107.71	..36.02	110.96	37.98	39.00	13.04	39.00	13.36	84.12	28.2	128.77	44.1
13.....	115.16	35.87	118.66	37.55	37.00	11.52	37.00	11.71	88.27	27.5	146.67	46.1
14.....	107.03	32.43	110.75	34.50	38.00	11.51	38.00	11.83	97.35	29.5	144.77	45.1
15.....	111.47	36.73	114.92	38.96	37.00	12.21	37.00	12.54	80.84	28.0	131.27	44.5
16.....	104.34	30.40	107.27	31.84	43.00	12.54	43.00	12.76	102.21	29.8	154.01	45.7
17.....	120.51	38.62	122.29	43.51	40.00	12.82	40.00	14.23	89.54	28.7	126.29	45.3
18.....	118.10	37.97	120.74	41.19	35.00	11.25	35.00	11.90	86.46	27.9	129.36	44.0
19.....	114.76	35.88	116.60	39.63	36.00	11.18	36.00	11.24	88.87	27.6	129.36	44.0
20.....	116.06	35.93	123.05	40.21	36.00	11.14	36.00	11.76	89.79	27.8	134.64	44.0
21.....	110.75	29.13	113.25	31.19	42.00	11.05	42.00	11.56	117.80	31.0	168.79	46.5
22.....	116.86	38.25	119.79	40.85	37.00	12.13	37.00	12.13	87.84	28.8	127.43	43.8
23.....	109.60	37.95	113.14	39.54	32.00	11.07	32.00	11.18	83.81	29.0	125.85	44.0
24.....	118.61	36.61	121.91	38.21	46.80	14.44	46.80	14.67	93.31	28.8	144.83	45.4
25.....	103.08	32.11	106.30	34.18	37.00	11.52	37.00	11.89	92.17	28.7	142.12	45.7
26.....	111.89	37.29	115.00	39.51	33.00	11.00	33.00	11.34	84.00	28.0	128.04	44.0
27.....	118.26	33.81	121.02	36.89	53.60	15.31	53 60	16 34	100 10	28.6	147.60	45.0
28.....	115.87	37.83	118.66	40.36	33.00	10.78	33.00	11.22	85.07	27.8	129.36	44.0
29.....	117.87	37.78	120.52	41.13	40.00	12.82	40.00	13.63	89.44	28.7	131.26	44.8
30.....	115.63	32.07	117.25	36.30	39.70	10.99	39.70	12.29	100.37	27.9	138.57	42.9
31.....	115.76	33.26	117.45	36.93	37 60	10.80	37.60	11.82	102.31	29.4	139.92	44.0
32.....	109.96	35.58	114.18	35.68	40.00	12.94	40.00	12.50	88.68	28.7	146.56	45.8
33.....	117.10	34.44	118.63	39.37	43.90	12.91	43.90	14.58	102.00	30.0	135.46	45.0
34.....	122.60	35.22	124.48	39.02	43.75	12.57	43.75	10.58	99.87	28.7	143.23	44.9
35.....	119.54	32.39	121.35	36.43	42.85	11.61	42.85	12.87	103.32	28.0	147.52	44.3
36.....	124.70	39.58	126.93	43.17	34.45	10.93	34.45	11.71	94.50	30.0	131.12	44.6
37.....	112.94	34.32	114.76	39.16	39.80	12.09	39.80	13.58	98.70	30.0	133.31	45.5
38.....	119.28	34.18	121.70	36.99	46.50	13.32	46.50	14.13	101.21	29.0	149.04	45.3
39.....	108.43	33.57	110.29	37.38	34.50	10.68	34.50	11.69	84.96	29.4	129.80	44.0
40.....	111.52	32.69	112.69	37.94	27.30	8.05	27.30	9.19	97.29	28.7	128.90	43.4
Total.	4568.24	1411.83	4672.21	1530.29	1536.50	472.98	1536.50	496.45	3736.66	1154.3	5451.60	1779.5
Av....	11.421	35.29	11.680	38.26	3.841	11.82	3.841	12.41	9.342	28.86	13.629	44.49

BARLEY—TABLE XXXIX, continued.

Cost of production and value of products of 400 acres of barley in 10 acre lots.

OFFICE NO.	TOTAL VALUE OF PRODUCT.				PROFIT.			
	Total value per acre and bushel.				*Profit per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	129.91	38.89	161.93	61.57	18.65	5.58	49.04	15.62
2	118.14	39.64	162.89	56.18	11.50	3.86	52.87	18.25
3	118.33	39.71	164.77	55.87	8.34	2.80	42.73	15.43
4	128.06	40.79	153.60	54.93	10.33	3.29	34.73	12.41
5	132.67	42.11	174.83	56.94	12.96	4.11	53.25	17.35
6	131.80	40.18	182.74	56.05	19.63	5.39	66.88	20.52
7	138.51	43.97	173.98	57.80	27.23	8.64	60.88	20.23
8	135.53	42.35	174.21	58.65	18.58	5.79	55.21	18.59
9	141.05	40.74	184.18	57.52	20.90	5.93	61.79	19.30
10	141.14	41.39	184.90	58.32	25.12	7.37	66.72	21.04
11	118.06	39.09	161.28	56.19	7.12	2.37	47.58	16.59
12	123.12	41.24	167.77	57.46	15.41	5.22	56.86	19.48
13	125.27	39.02	182.67	57.81	10.11	3.15	64.01	20.26
14	135.36	41.01	182.77	56.93	28.32	8.58	72.02	22.43
15	117.84	40.21	168.27	57.04	6.37	3.48	53.35	18.08
16	145.21	42.34	197.01	58.46	40.87	11.94	89.74	26.62
17	129.54	41.52	166.29	59.53	9.03	2.90	44.00	16.02
18	121.46	39.15	164.36	55.90	3.36	1.18	43.62	14.71
19	124.87	38.78	165.36	55.24	10.11	2.90	48.76	15.61
20	125.79	38.94	170.64	55.76	9.73	3.01	47.69	15.55
21	159.80	42.05	210.79	58.06	49.05	12.92	97.64	26.87
22	124.84	40.93	164.43	55.93	7.98	2.68	44.64	15.08
23	115.81	40.07	167.85	55.18	6.21	2.12	44.71	15.64
24	140.11	43.24	191.63	60.07	21.50	6.63	69.72	21.86
25	129.17	40.22	179.12	57.59	26.09	8.11	72.82	23.41
26	117.00	39.00	161.04	55.34	5.11	1.71	46.04	15.83
27	153.70	43.91	201.20	61.34	35.44	10.10	80.18	24.45
28	118.07	38.58	162.36	55.22	2.20	.75	43.70	14.86
29	129.44	41.52	171.26	58.43	11.57	3.74	50.74	17.30
30	140.07	38.89	178.27	55.19	24.44	6.82	61.02	18.89
31	139.91	40.20	177.52	55.82	24.15	6.94	60.07	18.89
32	128.68	41.64	186.56	58.30	18.72	6.06	72.38	22.62
33	145.90	42.91	179.35	59.58	28.80	8.47	60.82	20.21
34	143.62	41.27	186.98	55.48	21.02	6.05	62.50	16.46
35	146.17	39.61	190.37	57.17	26.63	7.22	69.02	20.74
36	128.95	40.93	165.57	56.31	4.25	1.35	38.64	13.14
37	138.50	42.09	173.11	59.08	25.56	7.77	58.36	19.92
38	147.71	42.32	195.54	59.43	28.43	8.14	73.84	22.44
39	119.46	40.08	164.30	55.69	11.03	6.51	54.01	18.31
40	124.59	36.75	156.20	52.59	13.07	3.86	43.51	14.65
Total	5273.16	1627.28	6988.10	2275.95	704.92	215.45	2315.89	745.66
Average	13.183	40.68	17.470	56.90	1.762	5.386	5.790	18.64

TABLE XL.—SUMMARY OF TABLE XXXIX.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 400 acres of Barley and the average cost per acre and bushel, the total value of products of 400 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	400 acres, 1896,	One acre.	Bush.	400 acres, 5 years.	One acre.	Bush.
	$	$	Cts.	$	$	Cts.
Plowing	430.89	1.077	3.34	430.89	1.077	3.53
Harrowing and seeding	236.36	.591	1.84	236.36	.591	1.95
Cutting	105.00	.262	.80	105.00	.262	.85
Fertilizing	1013.30	2.533	7.83	1013.30	2.533	8.30
Seed	241.82	.605	1.87	378.92	.947	3.10
Shocking and stacking	238.15	.595	1.84	238.15	.595	1.95
Threshing	279.87	.700	2.16	263.88	.660	2.16
Marketing	295.19	.738	2.28	278.06	.696	2.28
Interest	1241.82	3.105	9.58	1241.82	3.105	10.16
Wear and tear	185.84	.465	1.44	185.84	.465	1.52
Taxes	100.00	.250	.77	100.00	.250	.82
Other expenses	200.00	.500	1.54	200.00	.500	1.64
Total	4568.24	11.421	35.29	4672.21	11.680	38.26

Value of products.

Value of grain	**3736.66**	**9.342**	**28.86**	**5451.60**	**13.63**	**44.49**
Value of straw	**1536.50**	**3.841**	**11.82**	**1536.50**	**3.84**	**12.41**
Total value	**5273.16**	**13.183**	**40.68**	**6988.10**	**17.47**	**56.90**

Profit and loss.

Profit	**704.92**	**1.762**	**5.29**	**2315.89**	**5.790**	**18.6**
Loss	....	....	....	....	....	....
Balance profit	**704.92**	**1.762**	**5.29**	**2315.89**	**5.790**	**18.6**

TABLE XLI.

COST OF PRODUCTION AND VALUE OF 400 ACRES OF BARLEY.

The data upon which the calculations in the tables on this page are based may also be found in tables 42, 25, 26. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value or Cost," as the case may be. In Section 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	Bush.
			$	$	Cts.
1	Plowing	1812 hours at 24 cents	434.88	1.087	3.56
2	Harrowing, etc.	640 hours at 24 cents	153.60	.384	1.26
3	Seeding	344 hours at 24 cents	82.56	.206	.67
4	Cutting	384 hours at 24 cents	92.16	.230	.75
5	Shocking	464 hours at 11.8 cents	54.75	.137	.45
6	Stacking, man and team	492 hours at 24 cents	118.08	.296	.96
7	Stacking, extra man	492 hours at 11.8 cents	58.06	.145	.47
8	Threshing, labor	1112 hours at 11.8 cents	131.22	.328	1.08
9	Threshing, machinery	12229 bush. at 1 cent	122.29	.306	1.00
10	Marketing	832 hours at 24 cents	199.68	.499	1.63
11	Seed	840 bush. at 45 cents	378.00	.946	3.09
12	Taxes	400 acres at 26 cents	104.00	.260	.85
13	Fertilizing	1000 loads manure	400.00	1.000	3.27
14	Other expenses	400 acres at 50 cents	200.00	.500	1.64
15	Depreciation, machinery	1860.00 dollars at 10 per cent.	186.00	.465	1.52
	Annual investment		2715.28	6.788	22.20
16	Interest on machinery	1860.00 dollars at 6 per cent.	111.60	.279	.91
17	Interest, an. investment	2715.28 dollars at 6 per cent.	162.92	.407	1.33
18	Interest, land	16880.00 dollars at 6 per cent.	1012.80	2.532	8.29
	Total		4002.60	10.006	32.73

Total investment, $21,455.28. Average investment per acre, $53.64. Team work, 450.4 days. Labor, 667.2 days. Value per acre of land, $42.20.

2. *Value of products.*

1	12229 bushels parley at 44.5 cents, av. 6 years	5441.90	13.605	44.50
2	400 acres straw at $1.40	560.00	1.400	4.57
	Total	6001.90	15.005	49.07

3. *Surplus Value.*

Value above cost—profit	1999.30	4.999	16.34

Equivalent to 9.31 per cent. on the capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising barley.

Annual investment		2715.28	6.788	22.20
Machinery	$1,860.00 at 12 per cent.	223.20	.558	1.82
Annual investment	2,715.28 at 12 per cent.	325.83	.815	2.66
Total expenses less rent		3264.31	8.161	26.68
Surplus		*2737.58	6.844	22.39
Total		6001.89	15.005	49.07

*Capitalized at 12 per cent. equivalent to $22,813.17 or $57.03 per acre. This is $14.83 per acre above the value reported by the farmers.

TABLE XLII.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF BARLEY.

The data upon which the calculations in the table on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in Section 1. "Value of products" is shown in section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and the necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	Bush.
			$	$	Cts.
1	Plowing	1812 hours at 11.8 cents	213.81	.534	1.75
2	Harrowing, etc.	640 hours at 11.8 cents	75.52	.189	.62
3	Seeding	344 hours at 11.8 cents	40.59	.101	.33
4	Cutting	384 hours at 11.8 cents	45.33	.113	.37
5	Shocking	464 hours at 11.8 cents	54.75	.137	.45
6	Stacking	984 hours at 11.8 cents	116.12	.290	.94
7	Threshing	1112 hours at 11.8 cents	131.22	.328	1.07
8	Threshing	12229 bush. at 1 cent	122.29	.306	1.00
9	Marketing	832 hours at 11.8 cents	98.18	.246	.80
10	Seed	840 bush. at 45 cents	378 00	.945	3.09
11	Taxes	400 acres at 26 cents	104.00	.260	.85
12	Maintenance horses	400 acres at 92 cents	368.00	.920	3.01
13	Fertilizing	1,000 loads manure	400.00	1.000	3.27
14	Other expenses	400 acres at 50 cents	200.00	.500	1.64
15	Depreciation, machinery	1860.00 dollars at 10 per cent.	186.00	.466	1.52
16	Depreciation, horses	584.00 dollars at 10 per cent.	58.40	.146	.48
	Annual investment		$2592.21	$6.480	21.20
17	Interest, machinery	1860.00 dollars at 6 per cent.	111.60	.279	.91
18	Interest, horses	584.00 dollars at 6 per cent.	35.00	.088	.28
19	Interest, an. investment	2592.21 dollars at 6 per cent.	155.53	.388	1.27
20	Interest, land	16880.00 dollars at 6 per cent.	1012.80	2.532	8.28
	Total		$3907.14	$9.768	31.95

Total investment, $21,916.21. Average investment per acre, $54.79. Team work, 496.6 days. Labor 657 days. Value per acre of land, $42.20.

2. *Value of products.*

1	12229 bushels barley at 44.5 cents; av. 5 years	$5441.90	$13.604	44.50
2	400 acres straw at $1.40	560.00	1.400	4.57
	Total	$6001.90	$15.004	49.07

3. *Surplus value.*

Value above costs (profits)	$2094.76	$5.236	17.12

Equivalent to 9.56 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising barley.

Annual investment		$2592.21	$6.480	21.20
Machinery	$1860.00 at 12 per cent.	223.20	.558	1.82
Horses	584.00 at 12 per cent.	70.00	.175	.57
Annual investment	2592.21 at 12 per cent.	311.07	.779	2.54
Total expenses less rent		$3196.48	$7.992	26.13
Surplus credited to land		*2805.42	$7.012	22.94
Total		$6001.90	$15.004	49.07

*Capitalized at 12 per cent. equivalent to $23,371.83 or $58.43 per acre. This is $16.13 per acre above the value reported by the farmers.

In relation to the cost of producing 400 acres of barley, as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In Table XXXIX., covering six pages, the cost per 10 acres, the total cost of 400 acres and the average cost per acre are presented. Table XL. is made up of the totals of Table XXXIX. Table XLI. is a more complete analysis of Table XXXIX., including besides the expenses in that table, interest on the value of machinery used and upon the sum of the annual investments. These items of expenses were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are, with a few exceptions, similar to the expenses of other capital used and should therefore be treated accordingly. Another analysis of the Cost of Production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in Table XLII., and includes in the expenses wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expense. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost per acre and bushel of growing barley as computed from Table XXXIX. is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.534	1.75
Harrowing, etc.	.189	.62
Seeding	.101	.33
Cutting	.113	.37
Shocking	.137	.45
Stacking	.290	.94
Threshing, labor	.328	1.08
Threshing, machine	.306	1.00
Marketing	.246	.80
Seed	.945	3.09
Taxes	.260	.85
Maintenance, horses	.920	3.01
Fertilizing	1.000	3.27
Other expenses	.500	1.64
Depreciation, machinery	.465	1.52
Depreciation, horses	.146	.48
Annual investment	$6.480	21.20
Interest, machinery	.279	.91
Interest, horses	.088	.28
Interest, an. investment	.388	1.27
Interest, land	2.532	8.29
Total	$9.768	31.95

CORN.—TABLE XLIII.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE NO.	PLOWING.				HARROWING AND SEEDING.				CULTIVATING.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years	Bush 5 years Cts.
1	8.72	1.82	8.72	2.08	5.83	1.21	5.83	1.40	15.30	3.18	15.30	3.65
2	10.74	2.73	10.74	2.54	6.57	1.68	6.57	1.56	13.24	3.38	13.24	3.13
3	10.41	2.42	10.41	2.73	6.73	1.57	6.73	1.76	11.50	2.67	11.50	3.02
4	11.84	2.95	11.84	3.55	7.52	1.87	7.52	2.25	13.32	3.33	13.32	3.99
5	11.01	2.45	11.01	2.64	6.89	1.53	6.89	1.67	11.91	2.63	11.91	2.85
6	11.28	2.37	11.28	2.72	6.48	1.36	6.48	1.56	16.92	3.54	16.92	4.08
7	9.61	2.11	9.61	2.31	5.95	1.32	5.95	1.45	10.32	2.30	10.32	2.51
8	10.75	2.16	10.75	2.41	7.33	1.48	7.33	1.64	11.84	2.38	11.84	2.66
9	10.21	2.15	10.21	2.28	7.81	1.66	7.81	1.75	10.12	2.13	10.12	2.26
10	9.67	1.99	9.67	2.22	6.57	1.35	6.57	1.52	11.00	2.26	11.00	2.54
11	10.56	2.50	10.56	2.61	7.02	1.66	7.02	1.72	11.27	2.67	11.27	2.79
12	11.25	2.66	11.25	2.83	6.34	1.50	6.34	1.60	14.74	3.49	14.74	3.71
13	10.20	2.42	10.20	2.58	6.16	1.46	6.16	1.56	10.80	2.56	10.80	2.72
14	10.32	2.48	10.32	2.67	6.27	1.51	6.27	1.65	12.68	3.04	12.68	3.29
15	11.05	2.64	11.05	2.76	7.07	1.63	7.07	1.77	14.97	3.44	14.97	3.74
16	9.67	2.26	9.67	2.38	6.18	1.44	6.18	1.52	11.35	2.65	11.35	2.77
17	13.14	2.92	13.14	3.35	7.27	1.61	7.27	1.86	13.52	3.00	13.52	3.45
18	10.79	2.44	10.79	2.65	7.98	1.81	7.98	1.97	11.72	2.65	11.72	2.88
19	11.85	2.68	11.85	2.90	6.63	1.52	6.63	1.63	13.54	3.07	13.54	3.32
20	11.36	2.55	11.36	2.81	7.34	1.64	7.34	1.81	13.62	3.06	13.62	3.36
21	11.44	2.33	11.44	2.59	5.77	1.17	5.77	1.32	11.17	2.28	11.17	2.53
22	11.85	2.69	11.85	2.92	6.94	1.57	6.94	1.72	13.60	3.05	13.60	3.34
23	11.90	2.86	11.90	3.04	7.11	1.72	7.11	1.81	14.07	3.38	14.07	3.59
24	10.46	2.33	10.46	2.65	6.25	1.17	6.25	1.33	9.44	2.11	9.44	2.49
25	9.98	2.37	9.98	2.68	6.96	1.66	6.96	1.86	13.78	3.28	13.78	3.68
26	10.71	2.45	10.71	2.72	7.15	1.64	7.15	1.81	12.48	2.86	12.48	3.16
27	10.10	2.31	10.10	2.52	6.41	1.47	6.41	1.59	11.48	2.63	11.48	2.85
28	11.02	2.51	11.02	2.74	7.50	1.71	7.50	1.87	12.72	2.89	12.72	3.16
29	10.12	2.38	10.12	2.55	8.00	1.88	8.00	2.01	13.08	3.07	13.08	3.28
30	11.28	2.33	11.28	2.66	6.49	1.35	6.49	1.62	10.92	2.27	10.92	2.57
31	11.33	2.49	11.33	2.72	6.93	1.53	6.93	1.66	12.12	2.66	12.12	2.90
32	10.32	2.59	10.32	2.69	5.60	1.42	5.60	1.46	10.26	2.58	10.26	2.67
33	10.87	2.31	10.87	2.55	6.50	1.37	6.50	1.52	12.23	2.60	12.23	2.87
34	11.97	2.47	11.97	2.63	5.67	1.18	5.67	1.24	7.58	1.57	7.58	1.67
35	11.42	2.45	11.42	2.62	6.13	1.30	6.13	1.41	11.44	2.45	11.44	2.63
36	11.16	2.51	11.16	2.77	6.96	1.57	6.96	1.73	13.17	2.97	13.17	3.24
37	10.32	1.99	10.32	2.21	6.11	1.19	6.11	1.31	11.52	2.21	11.52	2.46
38	10.81	2.47	10.81	2.64	5.80	1.34	5.80	1.42	11.09	2.53	11.09	2.73
39	10.24	2.46	10.24	2.63	7.48	1.80	7.48	1.92	12.60	3.03	12.60	3.23
40	9.26	2.18	9.26	2.40	6.42	1.51	6.42	1.67	15.88	3.72	15.88	4.12
Total	430.89	97.08	430.89	105.95	267.12	60.36	267.12	65.83	494.21	111.67	494.21	121.79
Average	1.0772	2.427	1.0772	2.649	.6678	1.509	.6678	1.646	1.2355	2.789	1.2355	3.045

CORN.—TABLE XLIII, continued.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE No.	CUTTING.				HUSKING.				SHELLING.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	7.65	1.59	7.65	1.62	13.46	2.80	11.76	2.80	7.70	1.60	6.72	1.60
2	7.82	1.99	7.82	1.85	9.82	2.49	10.57	2.49	3.93	1.00	4.23	1.00
3	5.08	1.18	5.08	1.33	12.47	2.90	11.04	2.90	4.30	1.00	3.81	1.00
4	6.87	1.71	6.87	2.06	10.42	2.60	8.68	2.60	4.81	1.20	4.00	1.20
5	7.80	1.73	7.80	1.86	12.65	2.80	11.70	2.80	5.42	1.20	5.02	1.20
6	7.16	1.49	7.16	1.73	14.34	3.00	12.45	3.00	4.78	1.00	4.15	1.00
7	3.32	.74	3.32	.81	13.50	3.00	12.33	3.00	4.50	1.00	4.11	1.00
8	7.60	1.53	7.60	1.70	14.94	3.00	13.38	3.00	4.98	1.00	4.46	1.00
9	6.67	1.40	6.67	1.49	14.25	3.00	13.44	3.00	4.75	1.00	4.48	1.00
10	7.80	1.61	7.80	1.80	14.58	3.00	13.02	3.00	4.86	1.00	4.34	1.00
11	8.70	2.06	8.70	2.15	12.69	3.00	12.12	3.00	4.23	1.00	4.04	1.00
12	7.52	1.78	7.52	1.89	12.66	3.00	11.91	3.00	4.22	1.00	3.97	1.00
13	8.19	1.94	8.19	2.07	12.26	2.89	11.48	2.89	8.88	2.10	8.31	2.10
14	8.16	1.96	8.16	2.11	12.48	3.00	11.58	3.00	4.16	1.00	3.86	1.00
15	4.79	1.10	4.79	1.20	13.05	3.00	12.00	3.00	4.35	1.00	4.00	1.00
16	5.44	1.27	5.44	1.34	12.84	3.00	12.18	3.00	4.28	1.00	4.06	1.00
17	8.66	1.93	8.66	2.21	15.30	3.40	13.32	3.40	5.40	1.20	4.70	1.20
18	5.14	1.16	5.14	1.27	11.96	2.69	10.98	2.69	4.43	1.00	4.07	1.00
19	7.50	1.65	7.50	1.84	13.26	3.00	12.24	3.00	4.42	1.00	4.08	1.00
20	6.72	1.51	6.72	1.66	13.35	3.00	12.15	3.00	4.45	1.00	4.05	1.00
21	7.70	1.57	7.70	1.74	14.70	3.00	13.26	3.00	4.90	1.00	4.42	1.00
22	6.44	1.45	6.44	1.59	13.26	3.00	12.15	3.00	4.42	1.00	4.05	1.00
23	5.66	1.36	5.66	1.44	12.48	3.00	11.76	3.00	4.16	1.00	3.92	1.00
24	4.56	1.02	4.56	1.16	13.44	3.00	11.82	3.00	4.48	1.00	3.94	1.00
25	6.31	1.49	6.31	1.69	12.63	3.00	11.19	3.00	10.42	2.48	9.31	2.49
26	7.87	1.68	7.87	1.86	13.11	3.00	11.85	3.00	4.37	1.00	3.95	1.00
27	4.71	1.06	4.71	1.17	13.11	3.00	12.06	3.00	4.37	1.00	4.02	1.00
28	6.35	1.44	6.35	1.58	13.17	3.00	12.06	3.00	4.39	1.00	4.02	1.00
29	8.07	1.89	8.07	2.03	12.32	2.89	11.54	2.89	4.67	1.10	4.37	1.10
30	7.44	1.54	7.44	1.75	14.49	3.00	12.75	3.00	6.27	1.30	5.62	1.30
31	6.25	1.37	6.25	1.49	13.65	3.00	12.54	3.00	4.55	1.00	4.18	1.00
32	5.80	1.45	5.80	1.51	11.94	3.00	11.52	3.00	3.98	1.00	3.84	1.00
33	7.03	1.50	7.03	1.60	14.13	3.00	12.81	3.00	4.71	1.00	4.27	1.00
34	7.35	1.51	7.35	1.62	14.55	3.00	13.62	3.00	4.85	1.00	4.54	1.00
35	5.16	1.10	5.16	1.19	13.98	3.00	13.08	3.00	4.66	1.00	4.36	1.00
36	6.72	1.62	6.72	1.67	13.32	3.00	12.09	3.00	4.44	1.00	4.03	1.00
37	8.50	1.63	8.50	1.82	15.60	3.00	14.04	3.00	5.20	1.00	4.68	1.00
38	5.48	1.25	5.48	1.34	13.11	3.00	12.27	3.00	4.37	1.00	4.09	1.00
39	5.77	1.39	5.77	1.49	12.48	3.00	11.70	3.00	4.16	1.00	3.90	1.00
40	5.00	1.18	5.00	1.29	12.81	3.00	11.58	3.00	4.27	1.00	3.86	1.00
Total	266.26	69.85	266.26	65.27	528.56	118.46	484.02	118.46	196.49	44.18	179.73	44.19
Average	.6656	1.496	.6656	1.632	1.3214	2.961	1.2100	2.961	.4912	1.104	.4493	1.104

CORN.—TABLE XLIII, continued.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE No.	MARKETING.				FERTILIZING.				INTEREST.			
	Cost per acre and bushel.				*Cost per acre and bushel.*				*Cost per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years $	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1........	12.98	2.70	11.34	2.70	34.70	7.21	34.70	8.26	30.60	6.36	30.60	7.28
2........	8.64	2.20	9.30	2.20	35.00	8.91	35.00	8.27	26.10	6.64	26.10	6.17
3........	13.33	3.10	11.81	3.10	35.00	8.14	35.00	9.18	26.70	6.21	26.70	7.02
4........	11.62	2.90	9.68	2.90	35.00	8.72	35.00	10.49	31.30	7.81	31.30	9.37
5........	9.49	2.10	8.78	2.10	34.90	7.72	34.90	8.35	37.20	8.23	37.20	8.85
6........	10.03	2.09	8.71	2.09	35.00	7.32	35.00	8.44	31.08	6.50	31.08	7.49
7........	11.70	2.60	10.69	2.60	37.00	8.22	37.00	9.00	30.60	6.80	30.60	7.44
8........	14.94	3.00	13.38	3.00	38.60	7.75	38.60	8.66	30.00	6.02	30.00	6.73
9........	15.67	3.30	14.78	3.30	34.50	7.26	34.50	7.70	33.60	7.08	33.60	7.50
10........	12.64	2.60	11.18	2.60	36.10	7.43	36.10	8.32	33.30	6.85	33.30	7.67
11........	12.29	2.90	11.72	2.90	35.00	8.29	35.00	8.66	29.40	6.95	29.40	7.27
12........	11.81	2.80	11.12	2.80	35.00	8.29	35.00	8.82	27.30	6.46	27.30	6.87
13........	8.46	2.00	7.92	2.00	35.00	8.27	35.00	8.84	33.90	8.01	33.90	8.56
14........	12.48	3.00	11.58	3.00	35.00	8.41	35.00	9.07	28.08	6.75	28.08	7.27
15........	13.05	3.00	12.00	3.00	35.00	8.65	35.00	8.76	30.66	7.05	30.66	7.66
16........	11.12	2.60	10.56	2.60	35.00	8.18	35.00	8.62	25.80	6.02	25.80	6.35
17........	14.85	3.30	12.93	3.30	35.00	7.78	35.00	8.93	30.90	6.87	30.90	7.88
18........	15.50	3.49	14.24	3.49	35.00	7.90	35.00	8.59	33.30	7.51	33.30	8.19
19........	13.26	3.00	12.24	3.00	35.00	7.91	35.00	8.58	27.60	6.24	27.60	6.76
20........	15.13	3.40	14.36	3.40	35.00	7.86	35.00	8.65	33.00	7.42	33.00	8.15
21........	11.27	2.30	10.16	2.30	35.00	7.14	35.00	7.93	31.02	6.33	31.02	7.01
22........	11.93	2.69	10.93	2.69	35.00	7.93	35.00	8.65	32.70	7.39	32.70	8.08
23........	13.31	3.20	12.54	3.20	35.00	8.41	35.00	8.93	24.48	5.88	24.48	6.24
24........	12.09	2.70	10.64	2.70	35.00	7.81	35.00	8.88	36.90	8.24	36.90	9.36
25........	10.94	2.59	7.70	2.60	35.00	8.31	35.00	9.38	22.98	5.46	22.98	6.16
26........	13.54	3.10	12.24	3.10	35.00	8.01	35.00	8.86	31.50	7.21	31.50	7.97
27........	9.18	2.10	8.44	2.10	35.90	8.21	35.90	8.93	35.28	8.07	35.28	8.78
28........	15.80	3.60	14.47	3.60	35.00	7.97	35.00	8.71	31.50	7.17	31.50	7.83
29........	12.32	2.90	11.54	2.90	35.00	8.23	35.00	8.79	30.90	7.28	30.90	7.76
30........	15.45	3.20	13.60	3.20	36.70	7.59	36.70	8.64	32.10	6.65	32.10	7.55
31........	12.28	2.70	11.28	2.70	34.40	7.56	34.40	8.23	30.30	6.66	30.30	7.25
32........	13.53	3.40	13.05	3.40	34.00	8.55	34.00	8.85	29.34	7.38	29.34	7.64
33........	13.18	2.80	11.96	2.80	37.80	8.02	37.80	8.85	31.50	6.69	31.50	7.38
34........	12.12	2.50	11.35	2.50	34.10	7.04	34.10	7.51	35.40	7.29	35.40	7.79
35........	12.60	2.70	11.77	2.70	35.90	7.70	35.90	8.23	33.90	7.27	33.90	7.77
36........	12.48	2.80	11.28	2.80	34.70	7.81	34.70	8.62	36.60	8.24	36.60	9.08
37........	11.06	2.30	10.76	2.30	35.85	6.89	35.85	7.66	31.50	6.06	31.50	6.73
38........	13.98	3.19	13.08	3.10	33.00	7.55	33.00	8.06	34.80	7.98	34.80	8.50
39........	11.23	2.70	10.53	2.70	36.20	8.70	36.20	9.28	26.10	6.27	26.10	6.69
40........	11.96	2.80	10.80	2.80	34.30	8.03	34.30	8.89	30.90	7.23	30.90	8.01
Total.	499.99	112.25	456.43	112.26	1408.65	317.08	1408.65	346.07	1240.12	278.53	1240.12	304.14
Aver.	1.2499	2.806	1.1411	2.809	3.5216	7.927	3.5216	8.652	3.1003	6.963	3.1003	7.603

CORN.—TABLE XLIII, continued.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE NO.	WEAR AND TEAR.				TAXES.				OTHER EXPENSES.			
	Cost per acre and bushel.				Cost per acre and bushel.				Cost per acre and bushel.			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	6.81	1.41	6.81	1.62	2.50	.52	2.50	.59	5.00	1.04	5.00	1.18
2	3.67	.93	3.67	.86	2.50	.63	2.50	.59	5.00	1.27	5.00	1.19
3	6.85	1.59	6.85	1.79	2.50	.58	2.50	.68	5.00	1.16	5.00	1.36
4	4.90	1.22	4.90	1.46	2.50	.62	2.50	.74	5.00	1.25	5.00	1.48
5	5.20	1.14	5.20	1.24	2.50	.55	2.50	.59	5.00	1.10	5.00	1.18
6	5.00	1.05	5.00	1.20	2.50	.52	2.50	.60	5.00	1.05	5.00	1.20
7	6.83	1.52	6.83	1.66	2.50	.56	2.50	.61	5.00	1.11	5.00	1.22
8	4.00	.80	4.00	.89	2.50	.50	2.50	.56	5.00	1.00	5.00	1.12
9	4.65	.98	4.65	1.04	2.50	.52	2.50	.56	5.00	1.04	5.00	1.10
10	4.65	.96	4.65	1.07	2.50	.52	2.50	.57	5.00	1.03	5.00	1.14
11	4.40	1.04	4.40	1.10	2.50	.59	2.50	.62	5.00	1.18	5.00	1.24
12	4.00	.95	4.00	1.01	2.50	.60	2.50	.63	5.00	1.20	5.00	1.26
13	4.50	1.06	4.50	1.13	2.50	.59	2.50	.63	5.00	1.19	5.00	1.27
14	4.00	.96	4.00	1.03	2.50	.60	2.50	.64	5.00	1.21	5.00	1.29
15	2.70	.62	2.70	.68	2.50	.57	2.50	.62	5.00	1.15	5.00	1.24
16	4.48	1.04	4.48	1.10	2.50	.59	2.50	.63	5.00	1.18	5.00	1.26
17	5.60	1.25	5.60	1.43	2.50	.55	2.50	.63	5.00	1.11	5.00	1.27
18	3.96	.89	3.96	.98	2.50	.56	2.50	.61	5.00	1.13	5.00	1.22
19	4.50	1.02	4.50	1.10	2.50	.57	2.50	.61	5.00	1.14	5.00	1.23
20	3.50	.78	3.50	.86	2.50	.56	2.50	.61	5.00	1.14	5.00	1.23
21	3.30	.68	3.30	.74	2.50	.51	2.50	.56	5.00	1.03	5.00	1.12
22	4.50	1.03	4.50	1.12	2.50	.56	2.50	.61	5.00	1.13	5.00	1.22
23	4.60	1.10	4.60	1.17	2.50	.60	2.50	.64	5.00	1.20	5.00	1.28
24	4.73	1.05	4.73	1.17	2.50	.56	2.50	.64	5.00	1.12	5.00	1.28
25	3.86	.91	3.85	1.04	2.50	.59	2.50	.68	5.00	1.19	5.00	1.36
26	4.00	.91	4.00	1.01	2.50	.57	2.50	.63	5.00	1.14	5.00	1.27
27	5.37	1.22	5.37	1.33	2.50	.57	2.50	.62	5.00	1.15	5.00	1.25
28	4.00	.91	4.00	.99	2.50	.57	2.50	.62	5.00	1.15	5.00	1.25
29	5.76	1.36	5.76	1.44	2.50	.58	2.50	.63	5.00	1.17	5.00	1.27
30	3.60	.75	3.60	.64	2.50	.51	2.50	.59	5.00	1.03	5.00	1.18
31	6.63	1.46	6.63	1.59	2.50	.55	2.50	.59	5.00	1.10	5.00	1.19
32	4.00	1.01	4.00	1.04	2.50	.62	2.50	.65	5.00	1.24	5.00	1.30
33	4.18	.88	4.18	.98	2.50	.53	2.50	.59	5.00	1.07	5.00	1.16
34	5.72	1.18	5.72	1.28	2.50	.51	2.50	.56	5.00	1.02	5.00	1.10
35	5.50	1.22	5.50	1.26	2.50	.53	2.50	.57	5.00	1.06	5.00	1.14
36	5.13	1.15	5.13	1.27	2.50	.56	2.50	.62	5.00	1.13	5.00	1.25
37	4.87	.93	4.87	1.04	2.50	.48	2.50	.53	5.00	.96	5.00	1.06
38	3.74	.85	3.74	.92	2.50	.57	2.50	.61	5.00	1.14	5.00	1.22
39	3.67	.85	3.67	.91	2.50	.60	2.50	.64	5.00	1.21	5.00	1.28
40	4.60	1.08	4.60	1.19	2.50	.58	2.50	.64	5.00	1.16	5.00	1.29
Total	185.84	41.74	185.84	45.58	100.00	22.24	100.00	24.51	200.00	45.08	200.00	49.15
Average	.4646	1.043	.4646	1.139	.250	.561	.250	.614	.500	1.127	.500	1.229

CORN.—TABLE XLIII, continued.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE NUMBER.	TOTAL COST OF RAISING PRODUCTS.				VALUE OF STALK.				VALUE OF CORN.			
	Cost per acre and bushel.				*Value per acre and bushel.*				*Value per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1....	151.25	31.44	146.93	34.98	61.30	13.74	61.30	14.59	112.07	23.3	144.90	34.5
2....	133.03	33.85	134.74	31.65	62.00	15.77	62.00	14.65	90.78	23.1	140.01	33.1
3....	139.87	32.52	136.48	35.87	50.00	11.62	50.00	13.12	98.47	22.9	148.47	33.2
4....	146.10	36.18	140.61	42.09	60.00	23.10	60.00	17.96	92.63	23.1	110.88	33.3
5....	149.97	33.18	147.91	35.37	61.90	13.47	61.90	14.81	110.23	24.4	142.12	34.
6....	1[illegible]9.57	31.29	145.73	35.11	60.00	12.65	60.00	14.94	114.72	24.0	148.15	35.7
7....	140.73	31.28	138.16	33.61	61.50	13.67	61.50	14.96	105.30	23.4	140.56	34.2
8....	152.48	30.62	146.84	33.87	62.05	12.46	62.05	13.91	118.52	23.5	164.31	34.6
9....	149.73	31.52	147.76	32.97	60.45	12.72	60.45	13.48	114.00	24.0	156.80	35.
10....	148.67	30.59	145.13	33.45	61.75	12.70	61.75	14.23	118.09	24.3	154.93	35.7
11....	143.06	33.64	141.73	35.06	60.00	14.18	60.00	14.65	96.02	22.7	133.32	33.
12....	142.34	33.73	140.65	35.42	60.00	14.22	60.00	15.11	98.32	23.3	131.01	33.
13....	145.85	34.40	143.96	36.35	60.00	14.18	60.00	15.15	105.32	24.9	144.93	36.6
14....	141.13	33.92	139.03	36.02	60.00	14.42	60.00	15.54	99.42	23.9	134.71	34.9
15....	144.19	33.16	141.74	35.43	60.00	13.78	60.00	15.00	102.22	23.5	134.40	33.6
16....	133.66	31.23	132.22	32.57	60.00	14.02	60.00	14.78	109.56	25.6	143.72	35.4
17....	157.14	34.92	152.54	38.91	60.00	13.33	60.00	15.31	101.25	22.5	131.71	33.5
18....	147.28	33.23	[illegible].68	35.54	60.00	13.55	60.00	14.74	102.33	23.1	134.31	33.
19....	145.06	32.80	142.68	34.97	60.00	13.57	60.00	14.71	101.66	23.0	133.41	33.7
20....	150.97	33.92	148.60	36.54	60.00	13.48	60.00	14.61	105.02	23.6	133.65	33.
21....	143.77	29.34	140.74	31.84	62.00	12.65	62.00	14.02	122.50	25.0	160.44	36.3
22....	149.04	33.49	145.56	35.94	61.00	13.81	61.00	15.06	101.21	22.9	133.65	33.
23....	140.27	33.71	138.54	35.34	61.00	14.66	61.00	15.56	93.60	22.5	128.38	32.7
24....	143.85	32.11	140.24	35.57	61.80	13.78	61.80	15.68	105.73	23.6	145.38	36.9
25....	140.85	33.33	134.56	36.62	60.00	14.25	60.00	16.09	104.40	24.8	134.28	36.
26....	146.73	33.57	143.75	36.39	61.00	13.96	61.00	15.44	100.51	33.0	169.85	43.
27....	143.41	32.81	141.27	35.14	69.95	16.00	69.95	17.40	103.13	23.6	148.74	37.
28....	148.95	33.92	146.14	36.85	60.00	13.66	60.00	14.92	100.97	23.0	132.66	33.
29....	147.73	34.73	145.87	36.65	60.00	14.11	60.00	15.07	99.45	23.4	132.43	33.5
30....	152.24	31.52	147.90	34.80	60.25	12.47	60.25	14.17	113.98	23.6	145.35	34.2
31....	145.94	32.08	143.46	34.32	60.50	13.30	60.50	14.47	106.92	23.5	145.46	34.8
32....	135.27	34.24	135.23	35.21	60.50	15.20	60.50	15.75	97.11	24.4	142.08	37.
33....	149.63	31.77	146.64	34.34	60.75	12.89	60.75	14.22	114.45	24.3	148.16	34.7
34....	146.81	30.27	144.80	31.89	69.30	14.28	69.30	15.26	115.91	23.9	157.00	34.6
35....	148.09	31.78	146.16	33.52	60.30	12.94	60.30	13.83	110.91	23.8	156.96	36.
36....	152.13	34.26	149.34	37.05	58.60	13.20	58.60	14.54	105.23	23.7	132.99	33.9
37....	148.93	28.64	140.65	31.12	64.00	12.30	64.00	13.68	125.84	24.2	167.07	35.7
38....	143.68	32.87	141.66	34.62	60.50	13.84	60.50	14.79	109.25	25.0	146.16	36.
39....	137.33	33.01	135.59	34.77	58.25	14.00	58.25	14.91	97.34	23.4	132.60	34.
40....	142.90	33.47	140.10	36.30	57.50	13.46	57.50	14.89	100.77	23.6	130.46	36.3
Total	5818.13	1308.62	5713.27	1403.26	2428.15	554.29	2428.15	596.40	4225.19	957.6	5686.46	1388.1
Aver.	14.5403	32.716	14.2832	35.081	6.0704	13.857	6.0704	14.91	10.5639	23.94	14.2161	34.76

CORN.—TABLE XLIII, continued.

Cost of production and value of products of 400 acres of corn in 10 acre lots.

OFFICE NO.	TOTAL VALUE OF PRODUCTS RAISED.				PROFIT.			
	Total value per acre and bushel.				*Profit per acre and bushel.*			
	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.	Acre 1896 $	Bush 1896 Cts.	Acre 5 years $	Bush 5 years Cts.
1	173.37	36.04	206.20	49.09	22.12	4.60	59.27	14.11
2	152.78	38.87	202.01	47.75	19.75	5.02	67.27	15.90
3	148.47	34.52	198.47	46.32	8.60	2.00	62.04	10.45
4	152.63	46.20	170.88	51.16	7.53	10.02	30.27	9.07
5	172.18	37.87	204.02	48.81	22.21	4.69	56.11	13.44
6	174.72	36.55	208.15	50.64	25.15	5.26	62.42	15.53
7	166.80	37.07	202.06	49.16	26.07	5.79	53.90	15.55
8	180.57	36.26	216.36	48.51	28.09	5.64	67.52	15.14
9	174.45	36.72	[illegible]7.25	48.48	24.72	6.20	69.49	15.51
10	179.84	37.00	216.68	49.93	31.17	6.41	71.55	16.48
11	156.02	36.88	193.32	47.55	12.96	3.04	51.59	12.79
12	158.32	37.52	191 01	48.11	15.98	3.79	50.36	12.69
13	165.32	39.08	204.93	51.75	19.47	4.59	60.97	15.40
14	159.42	38.32	194.71	50.44	18.29	4.40	55.68	14.42
15	162.22	37.28	194.40	48.60	18.03	4.15	52.66	13.17
16	169.56	39.62	203.72	50.18	35.90	8.39	71.50	17.61
17	161.25	35.83	191.71	48.91	4.11	.91	39.17	10.00
18	162.33	36.65	194.31	47.74	15.05	3.42	49.63	12.20
19	161.66	36.57	193.41	47.41	16.60	3.77	50.73	12.44
20	165.02	37.08	193.65	47.81	14.05	3.16	45.05	11.27
21	184.50	37.65	222.44	50.32	40.73	8.31	81.70	18.48
22	162.21	36.71	194.65	48.06	14.17	3.22	49.09	12.12
23	154.60	37.16	189.38	48.26	14.33	3.45	50.84	12.92
24	167.53	37.35	207.18	52.68	23.68	5.27	66.94	17.01
25	164.40	39.05	194.28	52.09	24.05	5.72	59.72	15.47
26	161.51	46.96	230.85	58.44	14.78	13.39	87.10	22.05
27	173.08	39.60	216.69	54.40	29.67	6.79	71.42	19.26
28	160.97	36.66	192.66	47.92	12.02	2.74	46.52	11.57
29	159.45	37.51	192.43	48.57	11.72	2.78	46.56	11.92
30	174.23	36.07	205.60	48.37	21.99	4.55	57.70	13.57
31	167.42	36.80	205.96	49.27	21.48	4.72	62.50	14.95
32	167.61	39.60	202.58	52.15	21.34	5.36	67.35	17.54
33	175.20	37.19	208.91	48.92	25.57	5.42	62.27	14.58
34	185.21	38.18	226.36	49.86	38.40	7.91	81.56	17.97
35	171.21	36.74	217.26	49.83	23.12	4.96	71.10	16.31
36	163.83	36.90	191.59	48.44	11.70	2.64	42.25	11.39
37	189.84	36.50	231.07	49.38	40.91	7.86	85.42	18.26
38	169.75	38.81	206.66	50 79	26.07	5.97	65.00	16.17
39	155.59	37.40	190.85	48.91	18.26	4 39	55.26	14.14
40	158.27	37.06	187.96	48.69	15.[illegible]	3.59	47.86	12.39
Total	6653.34	1511.89	8114.61	198.45	835.21	203.27	2401.34	581.24
Average	16.633	37.797	20.2865	49.61	2.0880	5.082	6.0033	14.531

TABLE XLIV.—SUMMARY OF TABLE XLIII.

In the tables on this page have been summarized the results in the foregoing table. The tables show the total cost of producing 400 acres of Corn and the average cost per acre and bushel, the total value of products of 400 acres and the average value per acre and bushel. In the analysis of expenses wages was allowed for team work as well as for labor.

(For a more complete analysis of expenses in this case, both when wages is allowed for team work and when horses or their value is treated as capital, see the next two pages.)

Cost of production.

Items.	400 acres. 1896.	One acre.	Bush.	400 acres. 5 years.	One acre.	Bush.
	$		Cts.	$	$	Cts.
Plowing	430.89	1.077	2.43	430.89	1.077	2.66
Harrowing and seeding	267.12	.668	1.51	267.12	.668	1.65
Cultivating	494.21	1.236	2.79	494.21	1.236	3.05
Cutting	266.26	.667	1.50	266.26	.666	1.63
Husking	528.56	1.321	2.96	484.02	1.210	2.96
Shelling	196.49	.491	1.10	179.73	.449	1.10
Marketing	499.99	1.250	2.81	456.43	1.141	2.81
Fertilizing	1408.65	3.521	7.93	1408.65	3.522	8.65
Interest	1240.12	3.100	6.96	1240.12	3.100	7.60
Wear and tear	185.84	.464	1.04	185.84	.464	1.14
Taxes	100.00	.250	.56	100.00	.250	.61
Other expenses	200.00	.500	1.12	200.00	.500	1.23
	$5818.13	$14.545	32.71	$5713.27	$14.283	35.08

Value of products.

Value of grain	**$4225.19**	**$1.056**	**23.94**	**$5686.46**	**$1.422**	**34.70**
Value of straw	**2428.15**	**.607**	**13.85**	**2428.15**	**.607**	**14.91**
Total	**6653.34**	**1.663**	**37.79**	**8114.61**	**2.029**	**49.61**

Profit and loss.

Profit	**$835.21**	**$2.088**	**5.08**	**$2401.34**	**$6.003**	**14.531**
Loss	....	....	....	....	....	....
Balance profit	**$835.21**	**$2.088**	**5.08**	**$2401.34**	**$6.003**	**14.531**

TABLE XLV.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF CORN.

The data upon which the calculations in the tables on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in section 1. "Value of Products" is shown in section 2. Section 3 shows the "Surplus Value or Cost" as the case may be. In section 4 is presented the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery used, and also the "Surplus Value" above the sum of these expenses. It should be noticed that in this presentation wages has been allowed for team work in place of treating horses, or their value, as other capital.

1. *Cost of production.*

	Items.	400 acres.	One acre.	One Bush.
		$	$	Cts.
1	Plowing ....1812 hours at 24 cents	434.88	1.087	2.67
2	Harrowing, etc. .... 760 hours at 24 cents	182.40	.456	.112
3	Planting .... 464 hours at 24 cents	111.36	.279	.67
4	Cultivating ....2180 hours at 24 cents	523.20	1.308	3.20
5	Cutting, man and team.......... 720 hours at 24 cents	172.80	.432	1.06
6	Cutting, extra man.......... 720 hours at 11.8 cents	84.96	.212	.52
7	Husking, etc. ....4544 hours at 11.8 cents	536.19	1.340	3.29
8	Shelling ....16334 bush. at 1 cent	163.34	.408	1.00
9	Marketing .... 1945 hours at 24 cents	466.80	1.167	2.86
10	Seed .... 76 bush at 40 cents	30.40	.076	.18
11	Taxes .... 400 acres at 26 cents	104.00	.260	.63
12	Fertilizing, clover and.......... 1000 loads manure	500.00	1.250	3.06
13	Other expenses .... 400 acres at 50 cents	200.00	.500	1.22
14	Depreciation, machinery .1860.00 dollars at 10 per cent.	186.00	.465	1.14
	Annual investment	$3696.33	$9.240	22.63
15	Interest, machinery ...... 1860.00 dollars at 6 per cent.	111.60	.279	.68
16	Interest, an. investment.. 3696.33 dollars at 6 per cent.	221.78	.555	1.35
17	Interest, land .... 16880.00 dollars at 6 per cent	1012.80	2.532	6.20
	Total	$5042.51	$12.606	30.86

Total investment, $22436.33. Average investment per acre, $56.09. Team work, 788 days. Labor, 1314.5 days. Value per acre of land, $42.20.

2. *Value of products.*

1	16334 bushels corn at 34.7 cts.; av. 6 years..........	$5667.90	$14.169	34.7
2	400 acres stalks at $3.00..........	1200.00	3.000	7.34
	Total	$6867.90	$17.169	42.04

3. *Surplus value.*

Excess of value over cost (profits)..........	$1825.39	$4.563	11.18

Equivalent to 8.13 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of macninery used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising corn.

Annual investment	$3696.33	$9.240	22.63
Machinery ....$1860 at 12 per cent.	223.20	.558	1.36
Annual investment ....$3696.33 at 12 per cent.	443.56	1.109	2.72
Total expenses less rent..........	$4363.09	$10.907	26.71
Surplus credited to land	*2504.81	6.262	15.33
Total	$6867.90	$17.169	42.04

*Capitalized at 12 per cent. equivalent to $20873.42 or $52.18 per acre. This is $9.98 per acre above the value reported by the farmers.

TABLE XLVI.—COST OF PRODUCTION AND VALUE OF 400 ACRES OF CORN.

The data upon which the calculations in the table on this page are based may also be found in tables 24, 25, 26. "Cost of Production" is shown in section 1. "Value of Product" is shown in section 2. Section 3 shows the "Surplus Value" above cost. In section 4 is shown the Annual Investment and the respective amounts of interest and the necessary profit at 12 per cent. on same and upon the value of machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		400 acres.	One acre.	Bush. Cts.
			$	$	Cts.
1	Plowing	1812 hours at 11.8 cents	213.81	.534	1.31
2	Harrowing, etc.	760 hours at 11.8 cents	89.68	.224	.55
3	Planting	464 hours at 11.8 cents	54.75	.137	.34
4	Cultivating	2180 hours at 11.8 cents	257.24	.644	1.57
5	Cutting, man and team	720 hours at 11.8 cents	84.96	.212	.52
6	Cutting, extra man	720 hours at 11.8 cents	84.96	.212	.52
7	Husking and crib	4544 hours at 11.8 cents	536.19	1.340	3.28
8	Shelling	16334 bush. at 1 cent	163.34	.409	1.00
9	Marketing	1945 hours at 11.8 cents	229.51	.574	1.41
10	Seed	76 bush at 40 cents	30.40	.076	.18
11	Taxes	400 acres at 26 cents	104.00	.260	.63
12	Maintenance, horses	400 acres at 92 cents	368.00	.920	2.25
13	Fertilizing, clover and	1000 loads manure	500.00	1.250	3.06
14	Other expenses	400 acres at 50 cents	200.00	.500	1.22
15	Depreciation, machinery	1860.00 dollars at 10 per cent.	186.00	.465	1.14
16	Depreciation, horses	584.00 dollars at 10 per cent.	58.40	.146	.36
	Annual investment		$3161.24	$7.903	19.35
17	Interest, machinery	1860.00 dollars at 6 per cent.	111.60	.279	.68
18	Interest, horses	584.00 dollars at 6 per cent.	35.00	.088	.22
19	Interest, an. investment	3161.24 dollars at 6 per cent.	189.67	.474	1.17
20	Interest, land	16880.00 dollars at 6 per cent.	1012.80	2.532	6.20
	Totals		$4510.31	$11.276	27.62

Total investment, $22,485.24. Average investment per acre, $56.21. Team work, 788 days. Labor, 1314.5 days. Value per acre of land, $42.20.

2. *Value of products.*

1	16334 bushels corn at 34.7 cts.; av. 6 years	$5667.90	$14.169	34.7
2	400 acres stalks at $3.00	1200.00	3.000	7.34
	Total	$6867.90	$17.169	42.04

3. *Surplus value.*

Value above costs (profit)	$2357.59	$5.893	14.42

Equivalent to 10.44 per cent. on capital invested.

Part IV.—Annual investment. interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the product above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising corn.

Annual investment		$3161.24	$7.903	19.35
Machinery	$1860.00 at 12 per cent.	223.20	.558	1.36
Horses	584.00 at 12 per cent.	70.00	.175	.43
Annual investment	3161.24 at 12 per cent.	378.45	.946	2.31
Total expenses less rent		$3832.89	$9.582	23.45
Surplus credited to land		*3035.01	7.587	18.59
Total		$6867.90	$17.169	42.04

*Capitalized at 12 per cent. equivalent to $25291.06 or $63.23 per acre. This is $21.03 per acre above the value reported by the farmers.

In relation to the cost of producing 400 acres of corn as presented in the four preceding tables it is, perhaps, proper to repeat here a few facts to which attention has already been called.

In table XLIII, covering six pages, the cost per ten acres, the tota cost of 400 acres and the average cost per acre are presented. Table XLIV is made up of the totals of table XLIII. Table XLV is a more complete analysis of table XLIII, including besides the expenses in that table, interest on the value of machinery used and upon the sum of the annual investments. These items of expense were added because they are unavoidable in farming and constitute a proper charge against the products.

It should be noticed that in these three tables the expenses in farming arising from the use of horses for motor power was arrived at by allowing wages, at ruling rates in the respective localities, for team work. It appeared, however, that this is not the proper way in which to treat expenses of this nature. Work horses are usually regarded as capital invested. This being the case, expenses from this source are, with a few exceptions, similar to the expenses of other capital used and should therefore be treated accordingly. Another analysis of the Cost of Production was therefore made, in which the expenses arising from the horses used were treated from this point of view. This analysis is presented in table XLV and includes in the expenses, wages for man's labor only, while for horses, depreciation and interest on their value and actual yearly cost, per acre, of their maintenance was allowed as expenses. This method of treating expenses of this kind does not greatly affect the total cost, but is undoubtedly proper, at least in most cases.

The average cost per acre and bushel of growing corn as computed from table XLIII is shown below:

Items.	One acre.	One Bush.
	$	Cts.
Plowing	.534	1.31
Harrowing, etc.	.224	.55
Planting	.137	.34
Cultivating	.644	1.57
Cutting, man and team	.212	.52
Cutting, extra man	.212	.52
Husking and crib	1.340	3.29
Shelling	.409	1.00
Marketing	.574	1.41
Seed	.076	.18
Taxes	.260	.63
Maintenance, horses	.920	2.25
Fertilizing	1.250	3.06
Other expenses	.500	1.22
Depreciation, machinery	.465	1.14
Depreciation, horses	.146	.36
Annual Investment	$7.903	19.85
Interest, machinery	.279	.68
Interest, horses	.088	.22
Interest, an. investment	.474	1.17
Interest, land	2.532	6.20
Total	$11.276	27.62

TABLE XLVII.—FACTORS OF COST AND VALUE IN PRODUCING GRAIN.

On these two pages are presented in seven sections the data from which the "Cost of Production" and "Value of Products" as shown in following 5 tables, inclusively, have been computed. This data was obtained directly from the farmers. In section 1 is shown the rate of wages paid per day and mouth for labor and team work with or without board included. In section 2 is shown the average time needed per acre for properly performing the different parts of the work involved from the time the soil is prepared for seed until the time of threshing. Section 3 shows the data upon which the expenses of threshing, marketing and seed are based. Section 4 shows the number of acres under cultivation and not under cultivation, respectively, owned or controlled by the farmers reporting, and the value per acre in each case and the average value per acre. Section 5 shows the total value of machinery used and the value of the same to each acre under

1. *Wages paid per day and month.*

Items.	With Board.		Without Board.	
	Day.	Month.	Day.	Month.
Man and team of two horses	$1.90	$12.50	$2.35	$51.64
Labor, one man	.89	18.03	1.18	25.45
One team of two horses	1.01	24.47	1.17	30.19

2. *Time needed for doing certain parts of the work.*

Items.	Acres per day.	Hours per acre	Items.	Acres per day	Hours per acre.
Plowing, man and team	2.22	4.50	Planting corn, one man and team	7.15	1.40
Harrowing grain, man and team	6.00	1.70	Planting corn, one man	4.35	2.30
Harrowing corn, man and team	4.80	2.10	Cultivating corn, one man and team	1.51	6.60
Seeding grain, man and team	10.30	.97	Cutting, etc., corn, two men and team	5.20	1.96
Cutting grain, man and team	8.30	1.20	Cutting, etc., corn, one man, hand	1.40	8.30
Shocking grain, one man	8.30	1.20	Cutting, etc., corn, Av. table—I	....	2.50
Stacking grain, two men	8.28	1.25	Husking corn, one man hand	.80	12.00

3. *Threshing, marketing and seed.*

Items.	Threshing.			Marketing.			Seed per Acre.		
	Bushels per day.	Men employ'd	• Per bushel for machine.	Miles of hauling.	Loads per day.	Bush. per load.	Bushels.	Price.	
								1896.	5 y'rs
			CTS.						
Wheat	1100	12	2.	5.6	2	45	1.7	70	70
Corn	Shelling	....	1.3	5.6	2	50	⅜	40	45
Oats	1800	12	1.	5.6	2	90	2.5	30	30
Rye	800	12	2.	5 6	2	50	1.5	50	50
Barley	1300	12	2.	5.6	2	50	2.	47	48

cultivation, and the total value of the horses used and the average to each acre owned or controlled. Section 6 shows the data upon which taxes, the cost of maintaining horses and the cost of fertilizing are based.

In Section 7 is presented the data from which the "Value of Products" was arrived at or the yield in bushels per acre and the prices per bushel. also the value per acre of the accompanying straw or stalk. As regards the value of straw and stalks two estimates are given: one giving their value as compared with the commercial value of other products used for the same purpose; the other giving the value reported by the farmers.

For details of the greater part of the averages shown here see the preceding tables.

4. *Acres in farms, value per acre.*

Items.	Acres under cultivation.	Acres not under cultivation.	Total acres, average price.
Acres in farms of 70 farmers reporting..........	7831	7240	15071
Value per acre, average value....................	$57.90	$28.00	$43.54

5. *Value of machinery and horses used.*

Items.	Value per acre.	Total value.
Machinery: Per acre under cultivation, total value........	$2.7[illegible]	$21.692
Horses: Per acre in farms, total value.......................	.99	15.071

6. *Other items and factors of expense.*

Items.	Per acre.	Total.
Taxes: Per acre in farm, total paid..........................	$2.36	$3.557
Maintenance of horses: Per acre in farms, total cost.......	.68	10.248
Manures: Loads per acre, total loads..........................	2.40	18.860
Manures: Price per load bought, .90. Labor, cost per load		.25
Horses: Number used, 285. Average value..............................		52.68

7. *Yield per acre, price per bushel, value per acre of straw.*

Items.	Yield. 1896.	Price. 1896.	Yield. 5 Years.	Price. 5 Years.	Value of Straw.	
	Bushels.	Cents.	Bushels	Cents.	Estimated in feed and fert. stuffs.	Reported by farmers.
Wheat	18	66	17.5	61.	$2.10	$1.60
Corn..........................	43	22	42.	31.	5.50	3.85
Oats	41	16	40.	25.5	3 75	2.85
Rye........................	19	33	17.	43.	3.00	2.48
Barley......................	32	28	30.	42.	2.50	1.90

TABLE XLVIII.—COST OF PRODUCTION AND VALUE OF 1,000 ACRES OF WHEAT.

The data upon which the calculations in the table on this page are based may also be found in table XLVII. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		1000 acres.	One acre.	Bush.	Per cent.
			$	$	Cts.	
1	Plowing	4500 hours at 11.8 cents	531.00	.531	3.034	5.668
2	Harrowing, etc.	1700 hours at 11.8 cents	200.60	.200	1.142	2.141
3	Seeding	970 hours at 11.8 cents	114.46	.114	.651	1.222
4	Cutting	1200 hours at 11.8 cents	141.60	.142	.805	1.512
5	Shocking	1000 hours at 11.8 cents	118.00	.118	.694	1.260
6	Stacking, labor	2400 hours at 11.8 cents	283.20	.283	1.617	3.023
7	Threshing, labor	2090 hours at 11.8 cents	246.62	.246	1.405	2.633
8	Threshing, machine	17500 bush. at 1.8 cents	315.00	.315	1.800	3.362
9	Marketing	1930 hours at 11.8 cents	227.74	.228	1.297	2.431
10	Seed	1700 bush. at 70 cents	1190.00	1.190	6.800	12.703
11	Taxes	1000 acres at 23.6 cents	236.00	.236	1.348	2.519
12	Maintenance of horses	1000 acres at 68 cents	680.00	.680	3.886	7.260
13	Fertilizing, clover and	2400 loads manure	1000.00	1.000	5.714	10.675
14	Other expenses		500.00	.500	2.857	5.337
15	Depreciation, mach'y	$2,770.00 at 10 per cent.	277.00	.277	1.582	2.957
16	Depreciation, horses	990.00 at 10 per cent.	99.00	.099	5.60	1.057
	Total annual investment		6160.22	6.159	35.192	65.760
17	Interest, machinery	$2,770.00 at 6 per cent.	166.20	.166	.948	1.774
18	Interest, horses	990.00 at 6 per cent.	59.40	.059	.339	.634
19	Interest, an. invest.	6,160.22 at 6 per cent.	369.61	.370	2.109	3.945
20	Interest, land	43,540.00 at 6 per cent.	2612.40	2.613	14.925	27.887
	Cost 1,000 acres, 17,500 bush. wheat		9367.83	9.367	53.513	100.

Investment, 40 acres, $53.460.22. Average investment per acre, $53.46. Team work, 1150 days. Labor, 1579 days. Value per acre of land, $43.54.

2. *Value of products.*

1	Wheat	17500 bush. at 61 cents	10675.00	10.675	61.000	86.966
2	Straw	1000 acres at 160 cents	1600.00	1.600	9.014	13.034
	Total value 1,000 acres wheat		12275.00	12.275	70.014	100.

3. *Surplus value.*

1	Excess of value over cost—profit	2907.39	2.907	16.611

Equivalent to 5.44 per cent. on capital invested.

Part IV.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising wheat.

Annual investment		6160.22	6.160	35.192
Machinery	$2,770.00 at 12 per cent.	332.40	.332	1.905
Horses	990.00 at 12 per cent.	118.80	.119	.674
Annual investment	6,160.22 at 12 per cent.	739.22	.739	4.204
Total expenses less rent		7350.64	7.350	41.975
Surplus credited to land		*4924.36	4.925	28.039
Total		12275.00	12.275	70.014

*Capitalized at 12 per cent. equivalent to $41.036.33 or $41.04 per acre. This is $2.53 per acre below the value reported by the farmers.

TABLE XLIX.—COST OF PRODUCTION AND VALUE OF 1,000 ACRES OF OATS.

The data upon which the calculations in the table on this page are based may also be found in table XLVII. "Cost of Production" is shown in section 1. "Value of Products" is shown in section 2. Section 3 shows the "Surplus Value" above cost. In section 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.		1000 acres.	One acre.	One bush.
			$	$	Cts.
1	Plowing	4500 hours at 11.8 cents	$531.00	.631	1.327
2	Harrowing, etc.	1700 hours at 11.8 cents	200.00	.200	.500
3	Seeding	970 hours at 11.8 cents	114.46	.114	.286
4	Cutting	1200 hours at 11.8 cents	141.60	.142	.354
5	Shocking	1200 hours at 11.8 cents	141.60	.142	.354
6	Stacking, labor	2400 hours at 11.8 cents	283.20	.283	.708
7	Threshing, labor	3330 hours at 11.8 cents	392.94	.393	.982
8	Threshing, machine	40000 bushels at 1 cent	400.00	.400	1.000
9	Marketing	2220 hours at 11.8 cents	261.96	.262	.655
10	Seed	2500 bushels at 30 cents	750.00	.750	1.875
11	Taxes	1000 acres at 23.6 cents	236.00	.236	.590
12	Maintenance of horses	1000 acres at 68 cents	680.00	.680	1.700
13	Fertilizing, clover and	2400 loads manure	1000.00	1.000	2.500
14	Other expenses		500.00	.500	1.250
15	Depreciation, value of mach.	$2,770.00 at 10 per cent.	277.00	.277	.693
16	Depreciation, value of horses	990.00 at 10 per cent.	99.00	.099	.248
	Annual investment		6008.76	6.009	15.022
17	Interest on value of mach.	$2,770.00 at 6 per cent.	166.20	.166	.415
18	Interest on value of horses	990.00 at 6 per cent.	59.40	.059	.148
19	Interest on an. investment	6,008.76 at 6 per cent.	360.53	.361	.902
20	Interest on val. 1000 acres land	$43,540.00 at 6 per cent.	2612.40	2.612	6.531
	Cost 1000 acres oats		9207.29	9.207	23.018

Investment 1000 acres, $53,308.76. Average investment per acre, $53.31. Team work, 1179 days. Labor, 1652 days. Value per acre of land, $43.64.

2. *Value of products.*

		1000 acres.	One acre.	One bush.
1	Oats, 40,000 bush., at 25.5 cents	10200.00	10.200	25.50
2	Straw, 1,000 acres, at $2.85	2850.00	2.850	7.12
	Total value 1,000 acres oats	13050.00	13.050	32.62

3. *Balance between tables I. and II.*

		1000 acres.	One acre.	One bush.
1	Excess of value over cost—profits	3842.71	3.843	9.60

Equivalent to 7.02 per cent. on capital invested.

Sec. 4.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising oats.

			1000 acres.	One acre.	One bush.
1	Annual investment		6008.76	6.009	15.02
2	Machinery	$2,770.00 at 12 per cent.	332.40	.332	.83
3	Horses	990.00 at 12 per cent.	118.80	.119	.30
4	Annual investment	6,008.00 at 12 per cent.	721.06	.721	1.80
	Total expenses less rent		7181.02	7.181	17.95
5	Surplus credited to land		*5868.98	5.869	14.67
	Total		13050.00	13.050	32.62

*Capitalized at 12 per cent. equivalent to $48,908.17 or $48.91 per acre. This is $5.37 per acre above the value reported by the farmers.

TABLE L.—COST OF PRODUCTION AND VALUE OF 1,000 ACRES OF RYE.

The data upon which the calculations in the table on this page are based may also be found in table XLVII. "Cost of Production" is shown in Section 1. "Value of Products" is shown in Section .2 Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.	1000 acres.	One acre.	One Bush.
		$	$	Cts.
1	Plowing .... 4500 hours at 11.8 cents	531.00	.531	3.123
2	Harrowing, etc. .... 1700 hours at 11.8 cents	200.00	.200	1.176
3	Seeding .... 970 hours at 11.8 cents	114.46	.114	.673
4	Cutting .... 1200 hours at 11.8 cents	141.60	.142	.833
5	Shocking .... 1200 hours at 11.8 cents	141.60	.142	.833
6	Stacking, labor .... 2400 hours at 11.8 cents	283.20	.283	1.666
7	Threshing, labor .... 2975 hours at 11.8 cents	351.05	.351	2.065
8	Threshing, machine ....17000 bush. at 1.8 cents	306.00	.306	1.800
9	Marketing .... 1700 hours at 11.8 cents	190.60	.191	1.121
10	Seed .... 1500 bush. at 50 cents	750.00	.750	4.412
11	Taxes .... 1000 acres at 23.6 cents	236.00	.236	1.388
12	Maintenance, horses .... 1000 acres at 68 cents	680.00	.680	4.000
13	Fertilizing, clover and .... 2400 loads manure.....	750.00	.750	4.412
14	Other expenses	500.00	.500	2.941
15	Depreciation of machinery.....$2,770.00 at 10 per cent.	277.00	.277	1.629
16	Depreciation of horses.......... 990.00 at 10 per cent.	99.00	.099	.582
	Total annual investment..........................	5551.51	5.552	32.654
17	Interest on machinery.......... $2.770.00 at 6 per cent.	166.20	.166	.977
18	Interest on horses................ 990.00 at 6 per cent.	59.40	.059	.350
19	Interest on an. investment...... 5,551.51 at 6 per cent.	333.09	.333	1.959
20	Interest on 1000 acres land...... 43,540.00 at 6 per cent.	2612.40	2.612	15.365
	Cost 1000 acres rye................................	8722.60	8.722	51.306

Investment 1000 acres, $52,851.51. Average investment per acre, $52.85. Team work, 1127 days. Labor, 1664.5 days. Value per acre of land, $43.54.

2. *Value of products.*

1	Rye, 17,000 bush., at 45 cents..................................	7650.00	7.650	45.00
2	Straw, 1,000 acres, at $2.75..................................	2750.00	2.750	16.18
	Total value 1,000 acres rye..........................	10400.00	10.400	61.18

3. *Balance between tables I. and II.*

1	Excess of value over cost—profit..........................	1677.40	1.678	9.87

Equivalent to 3.2 per cent. on capital invested.

Sec. 4.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising rye.

Annual investment	5551.51	5.552	32.65
Machinery ....$2,770.00 at 12 per cent.	332.40	.332	1.95
Horses .... 990.00 at 12 per cent.	118.80	.119	.70
Annual investment .... 5,551.51 at 12 per cent.	666.18	.666	3.92
Total expenses less rent..................................	6668.89	6.669	39.23
Surplus credited to land..	*3731.11	3.731	21.95
Total	10400.00	10.400	61.18

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*Capitalized at 12 per cent. equivalent to $31,092.58 or $31.09 per acre. This is $12.45 per acre below the value reported by the farmers.

TABLE LI.—COST OF PRODUCTION AND VALUE OF 1,000 ACRES OF BARLEY.

The data upon which the calculations in the table on this page are based may also be found in table XLVII. "Cost Production" is shown in Section 1. "Value of Products" is shown in Section 2. Section 3 shows the "Surplus Value" above cost. In Section 4 is shown the "Annual Investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.	1000 acres.	One acre.	Per Bush.
		$	$	Cts.
1	Plowing .... 4500 hours at 11.8 cents	531.00	.531	1.713
2	Harrowing, etc. .... 1700 hours at 11.8 cents	200.00	.200	.645
3	Seeding .... 970 hours at 11.8 cents	114.46	.114	.369
4	Cutting .... 1200 hours at 11.8 cents	141.60	.142	.457
5	Shocking .... 1200 hours at 11.8 cents	141.60	.142	.457
6	Stacking, labor .... 2400 hours at 11.8 cents	283.20	.283	.913
7	Threshing, labor .... 3340 hours at 11.8 cents	394.12	.394	1.271
8	Threshing, machine ....31000 bush. at 1.6 cents	496.00	.496	1.600
9	Marketing .... 3100 hours at 11.8 cents	365.80	.366	1.180
10	Seed .... 2000 bush. at 48 cents	960.00	.960	3.097
11	Taxes .... 1000 acres at 23.6 cents	236.00	.236	.761
12	Maintenance of horses......... 1000 acres at 68 cents	680.00	.680	2.194
13	Fertilizing, clover and......... 2400 loads manure.....	1000.00	1.000	3.226
14	Other expenses	500.00	.500	1.613
15	Depreciation on val. of mach...$2,770.00 at 10 per cent.	277.00	.277	.894
16	Depreciation on value of horses 990.00 at 10 per cent.	99.00	.099	.319
	Annual investment	6419.78	6.420	20.709
17	Interest, value of machinery....$2,770.00 at 6 per cent.	166.20	.166	.536
18	Interest, value of horses........ 990.00 at 6 per cent.	59.40	.059	.192
19	Interest, an. investment ....6,419.78 at 6 per cent.	385.19	.386	1.242
20	Interest, value 1,000 acres land..43,540.00 at 6 per cent.	2612.40	2.612	8.427
	Cost 1,000 acres of barley..........................	9642.97	9.643	31.106

Total investment 1,000 acres, $53,719.78. Average investment per acre, $53.72. Team work, 1267 days. Labor, 1841 days. Value per acre of land, $43.54.

2. *Value of products.*

1	Barley, 31.000 bush., at 40.5 cents..........................	12555.00	12.565	40.50
2	Straw, 1,000 acres, $1.90....................................	1900.00	1.900	6.13
	Total value 1,000 acres barley....................	14455.00	14.455	46.63

3. *Balance between tables I. and II.*

1	Excess of value over cost—profit	4812.03	4.812	15.52

Equivalent to 8.96 per cent. on capital invested.

Sec. 4.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus if credited to land and capitalized at 12 per cent. gives the value of the land for raising barley.

Annual investment	6419.78	6.420	20.709
Machinery ....$2,770.00 at 12 per cent.	332.40	.332	1.072
Horses .... 990.00 at 12 per cent.	118.80	.119	.383
Annual investment .... 6,419.78 at 12 per cent.	770.38	.770	2.484
Total expenses less rent..........................	7641.36	7.641	24.648
Surplus credited to land..	*6813.64	6.814	21.980
Total	14455.00	14.455	46.628

*Capitalized at 12 per cent. equivalent to $56,780.33 or $56.78 per acre. This is $13.24 per acre above the value reported by the farmer.

TABLE LII.—COST OF PRODUCTION AND VALUE OF 1,000 ACRES OF CORN.

The data upon which the calculations in the table on this page are based may also be found in table XLVII. "Cost of production" is shown in section 1. "Value of products" is shown in section 2. Section 3 shows the "surplus value" above cost. In section 4 is shown the "annual investment" and the respective amounts of interest and necessary profit at 12 per cent. on same and upon the value of the machinery and horses used, also the surplus value of these expenses. In this presentation horses, or their value, have been treated as other capital.

1. *Cost of production.*

	Items.	1,000 acres.	One acre.	Per bushel. Cts.	Per cent.
1	Plowing 4,500 hours at 11.8 cents	$531 00	$.531	1.265	4.636
2	Harrowing, etc. 2,100 hours at 11.8 cents	247 80	.248	.588	2.165
3	Planting 1,400 hours at 11.8 cents	165 20	.165	.393	1.440
4	Cultivating 6,600 hours at 11.8 cents	778 80	.779	1.853	6.801
5	Cutting 6,550 hours at 11.8 cents	772 90	.773	1.838	6.748
6	Husking 12,500 hours at 11.8 cents	1,475 00	1.475	3.512	12.877
7	Marketing 4,200 hours at 11.8 cents	495 60	.496	1.180	4.330
8	Shelling 42,000 bush. at 1.3 cents	546 00	.546	1.300	4.767
9	Seed 188 bush. at 40 cents	75 20	.075	.180	.656
10	Taxes 1,000 acres at 23.6 cents	236.00	.236	.562	2.060
11	Maintenance of horses 1,000 acres at 68 cents	680 00	.680	1.620	5.936
12	Fertilizing, clover and 2,400 loads manure	1,250 00	1.250	2.978	10.912
13	Other expenses	500 00	.500	1.192	4.365
14	Depreciation, value of mach'y, $2,770.00 at 10 p ct.	277 00	.277	.660	2.417
15	Depreciation, value of horses 990.00 at 10 p. ct.	99 00	.099	.236	.864
	Total annual investment	$8,129 50	$8.130	19.357	70.974
16	Interest on value of machinery. $2,770 00 at 6 p. ct.	166 20	.166	.395	1.449
17	Interest on value of horses 990.00 at 6 p. ct.	59 40	.059	.141	.515
18	Interest on annual investment 8,129.50 at 6 p. ct.	487 68	.488	1.161	4.260
19	Interest on val. 1000 acres land 43,540.00 at 6 p. ct.	2,612 40	2.612	6.220	22.802
	Cost 1,000 acres corn	$11,455 18	$11.455	27.275	100

Investment 1.000 acres, $55,429.50. Average investment per acre $55.42. Team work, 2,036 days. Labor, 3765 days. Value per acre of land, $43.54.

2. *Value of products.*

	Items.	1,000 acres.	One acre.	Per bushel. Cts.	Per cent.
1	Corn 42,000 bush. at 31.5 cents; av. price 5 yrs.	$13,230 00	$13.230	31.500	77.458
2	Stalks 1,000 acres at $3.85 cents	3,850 00	3.850	9.190	22.542
	Total value	$17,080 00	$17.080	40.691	100

Equivalent to 3.08 per cent. on capital invested.

3. *Balance between tables I. and II.*

	Items.	1,000 acres.	One acre.	Per bushel. Cts.
1	Excess of value over cost = profit =	$5,624 82	$5.624	13.38

* Equivalent to 10.15 per cent. on capital invested.

SEC. 4.—Annual investment, interest and necessary profit at 12 per cent. on same and upon the value of machinery and horses used; also the surplus value of the products above the sum of these expenses. This surplus, if credited to land and capitalized at 12 per cent., gives the value of the land for raising corn.

	Items.	1,000 acres.	One acre.	Per bushel. Cts.	Per cent.
1	Annual investment	$8,129 50	$8.130	19.36	....
2	Machinery $2,770.00 at 12 per cent.	332 40	.332	.79	....
3	Horses 990.00 at 12 per cent	118 80	.119	.29	....
4	Annual investment 8,129.50 at 12 per cent.	975 54	.975	2.32	....
	Total expenses, less rent	$9,556 24	$9.556	22.76	....
	Surplus credited to land	7,523 76	7.524	17.91	....
	Total	$17,080 00	$17.080	40.69	....

Capitalized at 12 per cent., equivalent to $62,698.00 or $62.70 per acre. This is $19.16 per acre above the value reported by the farmers.

While each of the preceding tables has been briefly explained, little has been said regarding their presentation as a whole. A few explanations along this line may therefore be in order.

Broadly speaking, the tables are made up of such data relating to the cost of growing grain and the value of the same, as was inquired about in our schedules and furnished by farmers, as well as of the deductions and calculations that have been made from this data. The tables are so arranged that they may be divided into three almost complete parts.

Part one consists of Tables I to XXIII, inclusive. The first three of these contain the data furnished by 40 farmers and includes all items which enter into or has been taken into account in computing the "Cost of Production" and "Value of Products" in this case. The remaining twenty tables include the deductions and figures made from this data and show the cost and value of 40 acres each of Wheat, Oats, Rye, Barley and Corn, and the amount per acre and bushel in each case.

Part two consists of Tables XXIV to XLVI, inclusive. The first three tables show the basic data and includes 400 reports. The remaining twenty include the facts drawn from this data and show the results of 400 acres of each crop in the calculations. As to the arrangement of the facts and methods of treating expenses, this part is identical with Part One.

Part three consists of Tables XLVII to LII, inclusive. The scope of this part is more limited than of the other parts, but the principles involved are the same. The first table includes the reports of 70 farmers and covers the basic data. The remaining five tables show one analysis of the cost and value of 1,000 acres of each crop included.

We see from this that the foregoing tables may be divided into three independent parts; that they include 510 reports; that these reports are compiled in seven tables practically, and as investigation will show, only in three tables, and that the calculations and conclusions cover forty-five tables. The facts in the basic tables constitute, so to say, the center upon which the whole investigation has been made to turn. If correct, the results must also be correct, as precautions were taken against errors in computing the cost and value from them. Their importance seemed to warrant further analysis. For this purpose the 510 reports in question were compiled in one table and presented on the next two pages.

TABLE LIII.—FACTORS OF COST AND VALUE IN PRODUCING GRAIN.

This table includes the reports of 510 farmers or the data upon which the preceding parts of this investigation are based. While thus, this data has already appeared either in groups, or in detail in connection with the calculations based upon it, further analysis was thought necessary. For this purpose it was compiled into one table and presented here. The table is divided into seven sections and briefly described as follows:

In Section 1 is shown the rate of wages paid per day and month for labor and team work, with or without board included. In Section 2 is shown the average time needed per acre for properly performing the different parts of the work involved from the time the soil is prepared for seed until the time of threshing. Section 3 shows the data upon which the expenses of threshing, marketing and seed are based. Section 4 shows the number of acres under cul-

1. *Wages paid, per day and month.*

Items.	With Board.		Without Board.		Difference.
	Day.	Month.	Day.	Month.	Day.
Man and team of two horses......	$1.851	$41.692	$2.390	$52.000	$0.439
Labor, one man	.90	17.640	1.183	26.115	.284
Team of two horses...............	.951	24.062	1.207	25.885	.255

2. *Time needed for doing certain parts of the work.*

Items.	Acres per day.	Hrs. per acre.	Items.	Acres per day.	Hrs. per acre.
Plowing, man and team ..	2.210	4.530	Planting corn, hand, one man	4.025	2.490
Harrowing for corn, man and team	5.128	1.950	Cultivating corn, man and team	1.750	5.720
Harrowing for grain, man and team	6.135	1.630	Cutting corn, two men and team	5.500	1.820
Seeding grain, man and team	11.111	.900	Cutting corn, hand, one man	1.272	7.860
Cutting grain, man and team	11.145	.987	Cutting corn, av. tables 1, 24	2.020	4.960
Shocking grain, one man..	8.453	1.183	Husking, etc., corn, hand, one man	.883	11.320
Stacking grain, two men..	7.962	1.256			
Planting corn, man and team	8.210	1.210			

3. *Threshing, Marketing and Seed.*

Items.	Threshing.			Marketing.			Seeds per Acre.		
	Bushels per day.	No. men employed.	Per Bush for machine.	Miles of hauling.	Loads per day.	Bush. per load.	Bushels.	Price.	
								1896.	6 years
								Cts.	Cts.
Wheat	1018	13.6	1.16	6.30	2.02	43	1.7	70	70
Corn, shelling	....	....	1.3	6.30	2.02	44	1-5	35	40
Oats	1875	13.6	.89	6.30	2.02	76	2.5	30	35
Rye	977	13.6	1.14	6.30	2.02	46	1.6	45	50
Barley....	1486	13.6	1.14	6.30	2.02	47	2.1	40	45

tivation and not under cultivation respectively, owned or controlled by the farmers reporting, and the value per acre in each case and the average value per acre. Section 5 shows the total value of the machinery used and the value of same to each acre under cultivation; the total value of the horses used and the average value to each acre owned or controlled. Section 6 shows the data upon which taxes, the cost of maintaining horses and the cost of fertilizing are based.

In Section 7 is presented the data from which the "Value of Products" was arrived at or the yield in bushels per acre and the prices per bushel, also the value per acre of the accompanying straw or stalk. As regards the value of straw and stalk two estimates are given: one giving their value as compared with the commercial value of other products used for the same purpose; the other giving the value reported by the farmers.

4. *Acres in farms, value per acre.*

Items.	Acres under cultivation.	Acres not under cultivation.	Total acres, average prices.
Acres in farms of 510 farmers reporting	47,316	33,750	81,066
Value per acre, average value	$53.58	$30.58	$44.00

5. *Value of horses and machinery used.*

Items.	Value per acre.	Total value.
Machinery: per acre under cultivation, total value	$4.29	$203.234
Horses: per acre in farms, total value	1.25	110.999

6. *Other items and factors of expense.*

Items.	Per acre.	Total.
Taxes: per acre in farm, total paid	$0.256	$20.750
Maintenance of horses: per acre in farm, total cost	.867	70.240
Manures: loads per acre, total loads	2.300	108.000
Manures: price per load brought, $0.70, labor, cost per load		$0.30
Horses: number used, 1,945, average value		57.00

7. *Yield per acre, price per bushel, value per acre of straw.*

Items.	Yield. 1896.	Price. 1896.	Yield. 6 Years.	Price. 6 Years.	Value of straw Reported by farmers.
	Bushels.	Cents.	Bushels.	Cents.	
Wheat	18	65	17.5	61	$1.40
Corn	44	24	42	34	3.50
Oats	41	17	39	26	2.45
Rye	20	33	18	45	2.20
Barley	32	28	30	43	1.60

ANALYSIS.

As has been said the Cost and Value as presented in the foregoing tables was computed from the data, relating thereto, reported by 510 farmers. It has been seen that of these 510 reports, 40 constitute the basis for Tables I to XXIII, inclusive; that 400 reports make up the basis for Tables XXIV to XLVI, inclusive, and that 70 reports make up the Tables XLVII to LII, inclusive.

As considerable importance has been given to the data in these reports further explanations were thought necessary. For this purpose it was again compiled and, as a whole, presented in the foregoing table.

The table is divided into seven sections, each covering such parts of the whole as could conveniently be classed under the same head.

In the schedules, the farmers were requested to report the daily and monthly rate of wages, with and without board included, paid for labor and team work in their respective neighborhoods. It should be borne in mind that the method here adopted for determining the expense of labor, differs somewhat from that usually employed. In most cases where information as to the proportion of this expense to the total cost is desired for statistical purposes, it is obtained directly from the producers' accounts. But for obvious reasons this was impractical in this case.

Another method was therefore adoped. It was assumed that the actual labor involved in raising a given area of a certain crop, could be classified according to its nature and that it was possible to ascertain the time required to complete each class or kind of this labor. Accordingly the farmers were asked to give, in detail, the quantity of labor required, on the average, to properly raise a given area of grain. The farmers complied with this. The information thus obtained in addtion to the wages paid served as a basis from which the expenses of labor were arrived at. This readily explains why the questions relating to wages were included in the schedule.

The wages paid farm hands was reported by all whose schedules are included here and the rate reported was apparently correct. Those who hired labor gave the wages paid by them. Others gave the rate paid in their neighborhood.

As regards the wages of team work this can hardly be said. While the questions were answered, in most cases, the wages reported were not always that paid for farm work. The rate given was often that paid by the town or county for road making and other work of that kind. It appeared that teams or horses are seldom hired for wages for actual farm work because each farmer kept about as many work horses as he found necessary for doing his own work. As this seemed to be the case in most localities it is, of course, plain that no accurate rate of wages could be reported, at least, in many cases.

This suggests that, taking everything into consideration, wages is hardly the proper kind of compensation for team work on the farm unless expressly hired at a stipulated rate. Farmers who own their horses and use them only, so to say, on their own land, usually regard them as a part of their capital. In fact that is also the proper way to look at them. The horse is in many respects to the farmer what steam is to the manufacturer. The expenses from the use of both in production should be met by allowing, besides for the capital consumed, depreciation and interest and perhaps insurance for risks on their value. As has been seen this method of arriving at the expense of the use of horses, etc., for motor power, has been used in many of the analyses.

Section 1 shows the rate of wages paid. From this it appears that, man and team, with board and feed included as part payment, received on the average $1.85 per day, and that without board and feed $2.39 per day was the daily wage; that men were paid $.90 per day when board was included and $1.18 without board. The wages paid for team of two horses is also given, as well as the amount paid per month in each case.

In Section 2 in the foregoing table is presented the time required for a given number of men and team, when such are necessary, to properly perform the following distinct parts of the labor involved in raising grain: Plowing, Harrowing, etc., Seeding, Cutting, Shocking, Stacking grain and for Harrowing, Planting, Cultivating, Cutting and Husking Corn. As already explained the purpose of collecting this data was to obtain a basis upon which to compute the cost of these operations.

The greater portion of the answers were, of course, estimated, but many farmers kept the schedules during the season and made observations as the work progressed. The answers, however, were about the same in both cases. That such should be the case is only what might be expected. As a rule, the farmers are as competent to judge of the work in their line, as other business men of work that concerns their business. In making their reports the farmers were dealing in quantities with which they were thoroughly acquainted and with which it is a part of their regular duties to form opinions. That, under normal conditions, all competent farmers are able, with a little thought, to give, approximately, the time required for each of the different parts of the work, will hardly be denied. The returns were also carefully edited and all those which appeared defective excluded. In view of this it is only justice to say that the figures shown represent a fair average, and will, if correctly used, lead to reliable results.

Plowing is the first operation in order. The time per acre required for this varies with the character of the land, the kind of plow, and number of horses used, etc. This is plainly illustrated in some of the tables, particularly in Nos. IV and XXIV. In some cases 1.5 acres were given as a fair day's work, in other cases twice this number were finished. The average number of hours required per acre is 4.53. With $1.18 per day for man and $2.39 per day for man and team, as the rate of wages paid, the cost per acre under each of the two methods of analyzing expenses used in the foregoing tables is as follows:

Plowing one acre, 4.53 hours at 11.8 cents, one man...........	$0.535
Plowing one acre, 4.53 hours at 24 cents, man and team.........	1.087

From this it appears that the cost is greatly affected by the method of allowing wages. When wages is paid for man only the cost is 53.5 cents per acre. When wages is paid for both man and team the cost is $1.09 or more than twice as great. This difference, however, is more apparent than real, as the lower cost in the first place is, as is seen later, and also in the tables, largely offset by maintenance of horses and by interest and depreciation which in such cases should be added to the cost and which appear in separate items.

Harrowing and fitting is the next operation in order. This includes all the work of fitting the plowed field for seed, and when practiced, of dragging after seeding. The causes which effect the amount of work that can be done in a given time when plowing are also effective in this case. Some soils require more work than others. All kinds of harrows and tools used are not equally efficient. Three horses to the team also means, as a rule, more work done than when only two are used. The table shows that 1.63 or practically one and two-thirds hours are on the average required for properly fitting one acre of plowed land for the seed. On this basis and with wages the same as in plowing the cost in each case is as follows:

Harrowing, etc., one acre, 1.63 hrs. at 11.8 cents................	$0.192
Harrowing, etc., one acre, 1.63 hrs. at 24 cents..................	.391

In the former case the cost is somewhat over 19 cents per acre, in the latter about 39 cents per acre. The difference in cost between the two methods holds good in all cases where both man and teams are employed or required for the work.

Seeding is next. This was in all cases done with machines. Different kinds of seeders or drlls were used and as these vary in their capacity for work as well as men and horses and were employed under many different conditions there was also a difference in the area covered within a given time. The average time per acre was .90 or nine-tenth hour and the cost is:

Seeding one acre, .90 hrs. at 11.8 cents, man....................	$0.106
Seeding one acre, .90 hrs. at 24 cents, man and team............	.216

The cost of seeding under the two methods is thus 10.6 cent and 21.6 cents respectively.

Cutting: Wheat, Oats, Rye and Barley require little or no work from the time of seeding until ripe or ready for the binder. The next work in order therefore is cutting and in this is included the actual work of the driver and team. Binders and two or three horses were used in all cases and the average time required to cut one acre is seen to be .987 or almost one hour. The cost in each case is as follows:

Cutting one acre, .987 hrs. at 11.8 cents, man	$0.117
Cutting one acre, .987 hrs. at 24 cents, man and team	.237

With wages allowed for one man only the cost is 11.7 cents per acre. With wages for both man and team the cost is 23.7 cents per acre.

Shocking: When cut the grain is usually put up into shocks and thus left until stacking begins. It seemed from the returns that in most cases one man could shock up the grain as fast as cut by one binder. There were a few exceptions to this rule and the effect of these exceptions was to make the average time for shocking a trifle higher than for cutting or 1.183 hours.

Shocking one acre, 1.183 hours at 11.8 cents	$0.140

According to this the average cost per acre of shocking the grain is 14 cents.

Stacking: This includes all the work in connection with hauling the grain from the field where shocked to the place for stacking as well as the stacking itself. The cost is mostly affected by the distance of hauling and is based upon the wages and time required for two men and one team. According to the table the time needed per acre is 1.256 hours. The cost therefore is as follows:

Stacking one acre, 1.256 hrs. at 23.6 cents, two men	$0.296
Stacking one acre, 1.256 hrs. at 24 cents, man and team	.305
Stacking one acre, 1.256 hrs. at 11.8 cents, extra man	.148
Total	$0.453

From this it appears that when wages is allowed for men only the cost of stacking is 29.6 cents per acre and that, when wages is allowed for men and team, the cost is 45.3 cents per acre.

This brings the labor involved in raising Wheat, Oats, Rye and Barley down to threshing. It is undoubtedly a fact that now and then one or the other of the operations enumerated are found unnecessary as for instance, when after Potatoes or Corn some other crop is put in without plowing or when shocking or stacking may be dispensed with, but such cases appeared to be too rare to demand attention. The above expenses must therefore be figured on in growing the crops in question.

The next step will be to bring Corn down to the same point. Besides Plowing and Harrowing or fitting, the labor required in growing corn differs from that in growing the other crops. It was therefore necessary to explain this separately.

Harrowing and Fitting: As the cost of plowing is practically the same for all crops it need not be explained again. Harrowing, etc., is therefore the first item to receive attention. As for grain, this includes disking, harrowing, etc., both before and after planting, rolling or all the work required to fit the plowed soil for the seed and of dragging after planting. It will be noticed that, on the whole, more labor is expended to prepare the soil for corn than for the other crops included. The average time needed to prepare an acre for seed and for dragging after seeding in this case was 1.95 hours. This makes the cost:

Harrowing, etc., per acre, 1.95 hrs. at 11.8 cents, man..........	$0.23
Harrowing, etc., per acre, 1.95 hrs. at 24 cents, man and team..	.468

Allowing wages for man only the cost of these operations are thus seen to be 23 cents per acre as against 46.8 cents when wages is allowed for team also. This is about 4 and 8 cents higher than the cost shown for this work for the other crops.

Planting Corn: This included the actual work of marking, when practiced, and planting. Both hand and horse planters or checkrowers were used. While the latter predominated enough of the former were used to make it necessary to show the time required in each case. With hand planter 2.49 hours were required per acre, with horse planter 1.21 hours. On this basis the cost in each case was:

Planting one acre, 2.49 hrs. at 11.8 cents, hand planter...........	$0.296
Planting one acre, 1.21 hrs. at 11.8 cents, man......................	.143
Planting one acre, 1.21 hrs. at 24 cents, man and team........	.290

When hand planter was used the cost foots up to 29.6 cents per acre. For horse planter and wages for man only the cost is 14.3 cents, with wages for team also the cost is 29 cents.

Cultivating: In this item is included all the labor involved from planting until ready for cutting or harvesting. This labor consists almost wholly of cultivating or plowing as it was sometimes called. One man and two horses were used for this. The corn was cultivated from three to five times during the season and the time needed for this work was 5.72 hours per acre. This makes the cost:

Cultivating 1 acre, 5.72 hrs. at 11.8 cents, man	$0.677
Cultivating 1 acre, 5,72 hrs. at 24 cents, man and team	1.373

In the first case the cost was 67.7 cents per acre, in the second case $1.37 per acre.

Cutting, Etc.: This included cutting and shocking. As those who reported here cut their corn this is a proper charge. In some cases it was cut by hand, in others by a harvester or binder. In the latter case an extra man was required for shocking. The time needed to cut one acre by hand was 7.86 hours as against 1.82 hours with a harvester. The cost is as follows:

Cutting 1 acre by hand, 7.86 hrs. at 11.8 cents	$0.93
Cutting 1 acre, harvester, 1.82 hrs. at 23.6 cents, man	.43
Cutting 1 acre, harvester, 1.82 hrs. at 24 cents, man and team	.440
Cutting 1 acre, harvester, 1.82 hrs. at 11.8 cents, extra man	.215
Total with wages for man and team and extra man	$0.655

From the above it is seen that the average cost of cutting corn by hand was 93 cents per acre; that the average cost with binder and wages for two men only was 43 cents, and that the cost per acre when binder was used and wages allowed for both man and team and, besides this, for one extra man, was 65.5 cents.

Husking: This includes the cost of husking and cribbing the corn. With a few exceptions this work was done by hand and as it was done from the shocks or stacks, which is much slower work than when husked from the hills or standing, considerable time was required for it. Horses were used only for hauling the cobs to the cribs and this required so little time that it was not taken into account. The time required for one man to husk and crib one acre in 1897 was 11.32 hours and the money cost as follows:

Husking one acre corn, 11.32 hrs. at 11.8 cents....................	$1.34

This shows that the cost of husking and cribbing one acre of corn was $1.34. With a yield of 44 bushels to the acre this is equivalent to a small fraction over 3 cents per bushel.

This ends the analysis of the labor required, and the cost of same, in raising corn from the time of plowing until the crop is husked and cribbed. As the cost of labor in raising Wheat, Oats, Rye and Barley, down to threshing has already been presented we are now at a point where it practically only remains to show the labor needed for threshing, shelling and marketing in order to be able to determine the cost of labor in the production of these crops. The cost of seed is presented in Section 3 of the foregoing table.

Machines were, of course, used in threshing and shelling. As comparatively few owned such machines it was necessary to hire them. This was generally done at a fixed price per bushel threshed. To each thresher, from 16 to 20 men are usually employed; of these 4 were paid by the party furnishing the machine, and the balance besides board and feed, were paid by the farmers. The number of bushels threshed daily varied greatly with the kind of grain. The averages as shown in the table are: Wheat 1018 bushels, Oats 1375 bushels, Rye 977 bushels, Barley 1486 bushels. The average number of men paid by the farmers for this output is 13.6 with wages at $1.18 per day or 11.8 cents per hour. The labor cost per bushel of threshing Wheat is 1.58 cents; Oats .86 cents; Rye 1.65 cents; Barley 1.09 cents. If to this is added the price paid for the use of the machine which is 1.16, .89, 1.16, and 1.12 cents per bushel, respectively, for the crops in question, the following is the total cost per bushel of threshing: Wheat 2.74 cents, Oats 1.75 cents, Rye 2.81 cents, Barley 2.21 cents.

In hiring the machine a bargain was often struck under which the different crops, including all the different kinds of grain raised, was threshed at a fixed price. This led to some confusion in reporting. For instance, many farmers raisng more than one kind of grain reported the total number of bushels and the total price paid, but omitted to give the proportion in which the different kinds of grain were represented in these totals. This necessitated some adjustment on our part and it is possible that, although the greatest care was observed in making these and the totals are correct this resulted in some slight unfairness, either in the daily output or in the cost for the machine, to two or more of the crops. All such adjustments, however, were based upon the average of the complete reports and there is therefore good grounds for saying that any unfairness that may exist must be very slight and figures given show a fair average.

With wages the same as for other labor and the output, help employed and cost per bushel for machine, as shown in the table, the cost per acre for threshing an average yield of each crop is as follows:

Threshing one acre, 17.5 bus. of wheat at 2.74 cents..............	$0.480
Threshing one acre, 39 bus. of oats at 1.75 cents................	.680
Threshing one acre, 18 bus. of rye at 2.81 cents..................	.510
Threshing one acre, 30 bus. of barley at 2.21 cents..............	.663

On this basis the cost per acre of threshing is seen to be: Wheat 48 cents, Oats 68 cents, Rye 51 cents and Barley 66 cents. This is intended to include all the expenses involved in threshing except the cost of the fuel consumed by the engine. This item was omitted here because the data obtained in relation to it was very limted and apparently not reliable. The amount of this item, however, is small and fully covered under "Other expenses."

SHELLING: For that portion of the corn crop that is fed in the ear on the farm, shelling is obviously not a proper charge. In the general market, however, only shelled corn is considered and those therefore who sell their corn there, must also assume the cost of shelling it. In such case this was mostly done at the elevator and deducted from the price. Hence it was practically impossible to ascertain the proportion of the labor cost in this operation. The total cost per bushel varied from .5 to 2 cents, the average being about 1.3 cents. With an average yield of 42 bushels this makes the cost per acre 55 cents.

Shelling one acre, 42 bushels at 1.3 cents.........................	$0.55

Marketing: By this is meant the expense of hauling the crop from the farm where grown to the market where sold or to the elevator where it is received for shipping. This is an expense that cannot be avoided unless the products in some form are consumed at home and even in such cases it is more than likely some other expense takes its place. It is affected by the distance of hauling, the condition of the roads, etc. The average distance was 6.3 miles. A little over two or 2.02 loads were considered a day's work, and 43, 44, 76, 46 and 47 bushels of Wheat, Corn, Oats, Rye and Barley, respectively, constituted a load. On this basis the cost per bushel of each crop when wages is allowed for man only is, for Wheat, 1.37 cents, Corn 1.34 cents, Oats .77 cents, Rye 1.28 cents, Barley 1.26 cents. With wages for both man and team the cost is 2.80, 2.73, 1.58, 2.60, 2.55 cents per bushel in each case. This makes the cost per acre:

Wheat marketing per acre, 17.5 bus. at 1.37 cents, man..........	$0.24
Wheat marketing per acre, 17.5 bus. at 2.80 cents, man and team	.49
Corn marketing per acre, 42 bus. at 1.34 cents, man............	.56
Corn marketing per acre, 42 bus. at 2.73 cents, man and team..	1.14
Oats marketing per acre, 39 bus. at .77 cents, man...............	.30
Oats marketing per acre, 39 bus. at 1.58 cents, man and team..	.62
Rye marketing per acre, 18 bus. at 1.28 cents, man.............	.23
Rye marketing per acre, 18 bus. at 2.60 cents, man and team....	.47
Barley marketing per acre, 30 bus. at 1.26 cents, man...........	.38
Barley marketing per acre, 30 bus. at 2.55 cents, man and team..	.77

Seed: In most crops this was one of the biggest items in the cost. The quantity used per acre for each crop varied but little in each case, but the price per bushel reported differed considerably. In many reports the value per bushel for seed was placed from 5 to 25 cents per bushel higher than the price of the same grain for commercial purposes. According to the table the quantity used and the price per bushel of same is as follows: Wheat 1.7 at 72 cents per bushel, Corn .2 bushel at 40 cents per bushel, Oats 2.5 bushel at 35 cents a bushel, Rye 1.6 bushel at 50 cents per bushel, Barley 2.1 bushels at 45 cents per bushel; making the cost per acre of each crop:

Wheat, seed per acre, 1.7 bus. at 72 cents........................	$1.150
Corn, seed per acre, .2 bus. at 40 cents............................	.080
Oats, seed per acre, 2.5 bus. at 35 cents..........................	.880
Rye, seed per acre, 1.6 bus. at 50 cents............................	.800
Barley, seed per acre, 2.1 bus. at 45 cents........................	.950

In Section 4 is presented the number of acres under cultivation, the number not under cultivation and the total number of acres held by the 510 farmers reporting; also the average value in each case.

In the area under cultivation is included all the land under the plow, or which had been cleared up and put in shape for tilling. In the area not under cultivation is included all unbroken land or land which cannot be tilled without previous preparations or properly be classed as cultivated land. The area in the former case is 47,316 acres or an average to each farm of 92.78 acres, valued at $53.58 per acre. In the latter case the area was 33,750 acres or an average of 66.17 acres to the farm, valued at $30.58 per acre. This makes a grand total of 81,666 acres or an average of 158.95 acres to the farm with an average value of $44 per acre.

Efforts were made to obtain data that would enable us to present separately the value of the land and that of the permanent improvements thereon. These, however, did not bring the desired results. While the inquiries were broad enough to cover all the points, and also grouped for the purpose, the farmers, except in a few cases, only reported the total value of both land and improvements—exclusive of buildings—and then the total value of buildings. To distinguish such improvements as clearing, draining, fences, etc., from the land itself is very difficult. For all practical purposes they are generally regarded as a part of the land. Hence there is little or no occasion for keeping the amount invested in such improvements separate from the amount invested in land only.

As to the points covered, however, the answers were complete. These questions were also much easier to answer. Each neighborhood has a fairly well established value on its land. Besides this, its value may be, and often was considered to correspond to the amount given when the sum of its rents is capitalized at the current rate of interest. The value of buildings is also easily determined even when no account is kept of their cost. Especially is this true as compared in this respect, with most other improvements. Considering these facts, the reason why the farmers failed to report the value of the improvements referred to is easily seen.

As was said the value of buildings was reported separately from the value of land including such other improvements as could not be distinguished from it. Buildings, however, are necessary to farming and generally go with the land. Properly speaking they constitute a part of the capital invested in the business. Their value was therefore added to the land. This was done on such a basis that each acre shared equally, regardless of whether under cultivation or not. The value per acre given above includes, therefore, besides that of land the value of all improvements made upon it.

From this method of treating values it might be inferred that the difference in value between cultivated and uncultivated land, as shown, would indicate the value of improvements. This, however, is seldom the case. The elements which make up the value on both sides differ greatly, particularly in degree. For instance, the land varies as to productive power, improvements required and many other respects. Again land classed as uncultivated was often fenced, drained and partially or wholly cleared. It is plain that in either one of these cases its value was affected and that no inferences along this line can be safely made. The thoroughness of the inquiries, however, prevented much confusion and errors in the answers. Indirectly therefore the method adopted was the means of enabling us to present much more reliable data than would otherwise have been the case.

Rent or Interest on Land: This is by far the largest single item of expense. In about 98 per cent. of the reports rent was placed at about 6 per cent. on the average value of the land. The other 2 per cent. allowed a fixed proportion of crop for rent. In either case, however, it was found to amount to about the same. The cost of the use of land is therefore based upon 6 per cent. on its value. As this value consists of the improvements upon it as well as of the land the amount paid for its use is composed of both Rent and Interest. Hence this item is called "Interest on land" in this investigation. If the average value is used as the basis the cost per acre is as follows:

Interest on one acre of land, $44.00 at 6 per cent................	$2.64

In Section 5 is shown the total value of machinery and tools used as well as the average value of same to each acre under cultivation; the total value of work horses used and the average value of same to each acre in the farm.

The total value of the machinery used is seen to be $203,234. This is equivalent to $4.29 to each acre under cultivation or an average of $398.45 to each of the farms included. The total value of the horses is $110,999, or an average to each acre in the farm of $1.25 and to each farm of $217.65.

MACHINERY AND TOOLS: The schedules called for the value of the machinery, etc., required or used for farming purposes. By value in this case was meant the amount for which, at present prices, their machinery could be replaced with new. While all those included here reported, the figures given were not always those asked for. Many were unable to give the market prices at that time and therefore gave the prices paid when bought. Others again, gave the purchase price without any other explanation, evidently believing that this was the proper amount on which to compute expenses. The number thus giving the prices at which they bought their machinery, etc., footed up to over 50 per cent. of the whole. As prices of farm implements are gradually going down and were undoubtedly therefore lower in many cases at the time of reporting than when bought, it is also likely that the value shown in the tables is somewhat above the actual market price prevailing when the reports were made. While no reliable data bearing upon this difference could be obtained it appeared, after taking everything into account, that it was not big enough to cut much of a figure in the cost of raising the crops.

The expenses arising from the use of machinery, etc., consist of depreciation and interest. By depreciation is meant the wear and tear or gradual using up of the machinery used in production. The amount of this depreciation was variously estimated. In some cases it was placed as high as 12 per cent. on the value, in others again as low as 8 per cent. Perhaps 10 per cent. is a fair figure. This, at least, is the rate adopted in this investigation.

By interest in this case is meant the proper return to the amount invested in machinery, etc. The amount of this return usually corresponds to the amount paid for borrowed capital or money. As the current rate of interest was 6 per cent. this rate on its value was allowed for interest on machinery, etc.

With the value of the machinery and tools used, the area under cultivation and the respective rates of depreciation and interest given, the cost per acre in each case is easily computed.

Depreciation of machinery, etc., $4.29 per acre at 10 per cent...	$0.429
Interest on machinery, etc., $4.29 per acre at 6 per cent.........	.257
Total per acre	$0.686

From these figures we thus see that the expense of depreciation and interest to each acre under cultivation was 42.9 and 25.7 cents, respectively. It should be noticed here that under this method of treating these expenses they must be shared alike by all the crops included. As some crops undoubtedly require the use of more machinery in production than others, this may at first sight appear unfair. Upon closer consideration, however, it will be seen that to apportion this cost upon the basis of the machinery used for each crop is practically impossible. It will also be seen any apparent inequality in this respect would in the long run be wiped out by the rotation of crops and other causes.

Horses: At our present stage of industrial development horses are indispensable to production on the farm. The expenses which arise from their use have been figured both as wages and as depreciation, interest and maintenance on the capital invested in them. Which of these two methods is correct would seem to depend upon the circumstances in each case. When team work is actually hired for wages the amount thus paid, if feed is included, undoubtedly constitutes the expense of this work, but in the case of farmers who keep just enough horses for the running of their farm and who neither hire nor let such work for wages it would seem that the latter method applies. As the wages paid for team work has been explained already it only remains to point out the expense under the latter method.

Horses wear out and are subject to accidents of one kind or another. The expenses which result from this source are legitimate charges in the cost of production. Horses also cost money, that is, they cannot be obtained without a considerable outlay of capital or money. On the amount thus invested in them interest must be paid and this adds another item to the expense. Finally horses must be maintained, or fed and cared for. This is also combined with outlays that should be taken into account in arriving at the total cost.

DEPRECIATION OF HORSES: By this is meant an amount that corresponds closely to the wear and tear of machinery. Most of those who answered the questions relating to the amount that ought to be set aside annually for depreciation of horses placed it at from 8 to 12 per cent. on their value. The average was about 9 per cent. But as ordinary risks were not figured in this, the rate was placed at 10 per cent., with value as above this makes the cost per acre 12.5 cents.

Depreciation of horses, $1.25 per acre at 10 per cent............	$0.125

INTEREST ON VALUE OF HORSES: No inquiries regarding the rate of interest on capital invested in horses were made. But as it was thought likely that it would not differ greatly from the rate paid for other capital the current rate or 6 per cent. was adopted. With the value as shown this makes the cost per acre 7.5 cents.

Interest on value of horses, $1.25 per acre at 6 per cent........	$0.075

MAINTENANCE OF HORSES: This includes feed and care. The answers regarding this, while not as complete nor as full as would have been desirable, indicated that the average daily rations of a horse, including both the time at work and the time not working, was equivalent to 10 pounds of oats and 12 pounds of hay. At the average price of these products on the farm during the past 6 years, this would amount to $36.00 a year to each horse. As there were 1945 horses used the total cost was $70,240. With 81,066 acres included this would make the cost per acre $.8674.

Maintenance of horses, $70,240—81066 acres. Av. per acre........	$0.867

We see from this that the cost per acre of depreciation, interest and maintenance of horses was 12.5, 7.5, and 86.7 cents respectively or a total of $1.17 per acre. It should be noticed that the cost of maintenance is based upon the average price of oats and hay during the past six years and is therefore higher than would have been the case had it been based upon the prices paid for these products on the farm in 1896. It should also be noticed that in these calculations the total number of acres in the farms were included, regardless of whether under cultivation or not. This makes the actual cost per acre much lower than if the land under cultivation only had been included, but was thought fair because uncultivated land usually requires more or less team work as well as contributes to the maintenance of horses. Had the cost of horses under this method been charged to the area under cultivation only, the cost per acre would have been as follows: Depreciation 23.5 cents; interest 14 cents; maintenance $1.48 or a total per acre of $1.86.

While it is believed that the cost of maintenance as shown above is not far from correct, those who wish to do so may easily substitute the figures given by calculations of their own. It was for this purpose mainly that the actual time required for the team work involved was figured out and presented in notes under each of the tables showing the "Cost of Production."

TAXES: The farmers were asked to report all outlays for taxes or for assessments made on all the property used in production only. The amount given here therefore does not include taxes on bonds and stocks, mortgages or other securities. The total taxes paid was $20,750. As the area included constitutes 81,066 acres this is equivalent to 25.6 cents per acre or:

Taxes per acre	$0.256

FERTILIZING: According to the reports included here the fertility of the soil was kept up by barnyard and stable manures and by rotation with clover and other leguminous crops. The cost of keeping up the soil by these means was difficult to determine. Particularly because the farmers themselves in many cases did not seem to have any well defined views regarding it.

Manures were mostly so applied to the land that the whole area under cultivation requiring fertilizing was covered once during a period of 4 or 5 years. The labor involved in this consisted mostly of preparing, caring, hauling and spreading upon the field. The amount required for hauling and spreading was comparatively easy to ascertain, and varied in cost from 12 to 30 cents per load, depending mostly upon the distance of hauling. As to the other processes, however, the data obtained was rather limited. But enough was received to warrant the conclusion that the labor cost per load did not on the average exceed 30 cents.

While each piece of land was manured only once every 4 or 5 years the cost of this should be borne in just proportion by all the crops grown during this period. To effect this, as near as could be done with the means at hand, the average number of loads to each year or crop was ascertained As the table shows, this average consisted of 2.3 loads. At 30 cents per load, the yearly cost for the labor of manuring was thus 69 cents.

While 30 cents per load may represent the actual cost of the manures to the farmers they are undoubtedly worth more than this to him. This appears from the fact that farmers living in the neighborhood of towns, often buy manures there and besides the labor of hauling pay from 50 to 75 cents per load for same.

Clovers seemed to be used even oftener than manures. As has been said the value of clovers as fertilizers comes from the fact that they absorb nitrogen from the air and store it up in both tops and roots. Even the amount thus stored in the roots alone is sufficient for a crop of grain. As the tops cut off for fodder or hay are worth about as much as a crop of grain the farmers figured that the fertilizing obtained in this manner costs them nothing. When tops, usually the second growth, are plowed under, this mode of fertilizing is of course combined with an expense closely corresponding to the value for feed of materials plowed down.

The average price per load of manure, when purchased, was 65 cents. This figure was used as a basis for the cost of fertilizing in the foregoing tables in all cases where the cost of this item exceeds $1.25 per acre.

INTEREST ON THE ANNUAL INVESTMENT: By the annual investment in this case is meant the operating expenses on the farm. It includes all the expenses involved in growing and marketing the crops except rent on land and interest on permanent improvements, machinery and horses. Farmers as well as manufacturers must pay wages, buy materials and meet other outlays incident to production. The money with which this is done is a part of their necessary capital and upon this interest at current rates must be paid. As the farmer turns this capital over only once during the year the sum on which interest should be figured consists of their total outlay for such purposes. In the foregoing tables the annual investment was clearly distinguished from the other investments and its amount is therefore seen in each case.

OTHER EXPENSES: Besides the expenses enumerated and explained above there are other outlays which, directly or indirectly, must be provided for. Among these are binding twine, fuel for the engine when threshing, delays in the progress of the work caused by bad weather, accidents, etc. While the data obtained regarding these expenses was not fully reliable it indicated that, on the average, they would be amply covered by 50 cents per acre. This amount was therefore allowed and is included under "Other expenses."

With this the analysis of the "Cost of Production" as computed from the data in the preceding tables is concluded. The sole aim throughout the whole investigation was to get at the actual cost to the farmers. With this end in view only the best returns, such as bore signs of careful preparation and of being complete and correct were included. Before used they were also carefully examined and edited and precautions were taken against errors in the compilation. In view of this it is felt that conclusions shown can be depended upon and that they represent a true average for the state.

Attention should, perhaps, be called to the fact that no charge has been made for the cost of keeping up fences and buildings, nor for insurance against fire, accidents, etc. As the amount invested in both fences and buildings was included in the value given for land interest upon it has been charged. This, however, does not fully cover the expense of these items. Fences and buildings must be kept in repair. The cost of doing so should undoubtedly be charged to the "Cost of Production" on the land to which they belong. Most farmers also carry insurance against fire, etc., and this adds another item of expense. While no figures were asked regarding these expenses, several farmers included them in their report. From the facts thus submitted it appeared that the total expense from these sources cannot be much below 25 cents per acre. It is also possible that besides depreciation and interest on machinery as charged here, there ought to be an additional allowance for repairs such as are caused by accident, etc. Expenses of this kind, however, are easily estimated and those who feel they should be included can readily do so by adding what they consider a fair sum to the cost shown in the tables.

There is also another item which, while it constitutes a part of the true "Cost of Production" and has been so treated in the analysis tables of the different crops, has been left out of the above analysis; namely, that part of the "necessary profit" which economists usually term "Wages of Superintendence." In this analysis, as it stands, the farmers have received wages for such labor as they may perform and interest on the capital employed, but no allowance has been made as a compensation for their efforts and trouble in managing their farms. To such remuneration they are certainly entitled. Wthout it, in the long run, they neither would nor could stay in the business. In farming, as in other business, there are ups and downs. There are years of depressions during which they are barely able to meet actual outlays. Then again, there are years of good yields or high prices, perhaps both, leaving a surplus above expenses sufficient to offset the losses in poor years. The amount thus obtained necessary to cover "Wages of Superintendence" varies more from year to year, than any other item of expense. As a rule it is figured on the capital used. Experience and investigations in other lines of business show, that in average undertakings it corresponds to, or rather equals, the amount allowed for interest. As farming comes within the class of business referred to, the expense of superintendence or management can, in this investigation, be safely placed at 6 per cent. on the capital employed.

Having presented in detail the cost to the farmers of raising the crops in question, it remains to make a few explanations of the figures relating to the value of these crops.

Section 7 shows the yield per acre and price per bushel, as well as the average in each case for 6 years; also the value per acre of the accompanying straw and stalks. These figures were obtained in connection with those relating to the cost and cover the same area and may therefore be used in ascertaining the relation between the Cost of Production and Selling Price.

The products or crops thus consist of the grain and the accompanying straw or stalk. Regarding the data from which the value was computed it can be said that it bore every indication of being accurate or reliable, especially is this true of the data for 1896. The first schedule was sent out early in 1897. As the farmers mostly keep their accounts in their heads, it is, therefore, likely that the facts concerning their last crops should be more fresh in their minds than those of several years back. Indeed, this was fully explained in many cases. While the data for 6 years may not, for this reason be absolute, it is unquestionably so nearly so, that it can be safely used for the purpose for which it was intended.

The yield and price of each crop, both for 1896 and the average for 6 years, are so plainly shown in the table that no further explanations in this respect are needed. Computed, the data for 1896 gives the following as to the value per acre of the grain:

Wheat, 18 bushels per acre at 65 cents	$11.70
Oats, 41 bushels per acre at 17 cents	6.97
Rye, 20 bushels per acre at 33 cents	6.60
Barley, 32 bushels per acre at 28 cents	8.96
Corn, 44 bushels per acre at 24 cents	10.56

We see from this that in 1896 Wheat was worth $11.70, Oats $6.97, Rye $6.60, Barley $8.96, and Corn $10.56 per acre. Of the grain alone Wheat thus gave the greatest returns.

Corn comes next, and Rye, although the yield reported of it is considerably above the average, gave the lowest return.

The verage yield and price of grain as reported for six years gives the following as the value per acre of each crop:

Wheat, 17.5 bushels per acre at 61 cents	$10.68
Oats, 39 bushels per acre at 26 cents	10.14
Rye, 18 bushels per acre at 45 cents	8.10
Barley, 30 bushels per acre at 43 cents	12.90
Corn, 42 bushels per acre at 34 cents	14.28

These figures show the average value per acre of each crop for a period of six years. Comparing this with the value in 1896, a marked difference is noticed. Corn now ranks first, while Wheat is the third in order. Except in the case of Wheat, the average value for the period given is also considerably higher than that of 1896. This is mostly due to fluctuation in prices.

In the values thus shown Straw and Stalks were not included. The figures given, therefore, do not in any case represent the total value per acre of all the products. Straw and Stalks, while by-products only, are, if fully utilized, of considerable value to the farmers. While mostly used for feed and bedding or for fertilizers, these products often command a fair price in the market. The value placed upon them, however, varied greatly. Some based their estimates upon the commercial value of the feed and fertilizing elements in Straw and Stalks, as presented in official reports, without making any allowance for the form in which they are found. Others again were governed by what they considered the value of these products when used in their natural state upon the farm. The first of these estimates was used in the first presentation of the 40 and 400 acre lots, but the value given is considered too high. Ordinarily, the good the farmers get out of Straw, etc., is worth much less than this. The second method, or the farmers' own estimate, is undoubtedly the most nearly correct and this has therefore been used in the analysis tables. The average value per acre of straw and stalks in this latter case is as follows:

Wheat, straw per acre	$1.30
Oats, straw per acre	2.30
Rye, straw per acre	2.20
Barley, straw per acre	1.60
Corn, straw per acre	3.00

According to the estimates of the farmers themselves Wheatstraw is worth $1.30, Oat-straw $2.30, Rye-straw $2.20, Barley-straw $1.50, and Corn-stalks $3.00 per acre. In order to obtain the total value of the products per acre the value of the straw as thus shown should be added to the value of the grain as presented above. On this basis the total value per acre of both grain and straw, etc., in 1896 was as follows:

Wheat, grain and straw per acre	$13.00
Oats, grain and straw per acre	9.27
Rye, grain and straw per acre	8.80
Barley, grain and straw per acre	10.46
Corn, grain and stalk per acre	13.56

With the value of straw, etc., the same as in 1896, the average value per acre of each of the crops included of both the grain and straw for 6 years is:

Wheat, grain and straw per acre	$11.98
Oats, grain and straw per acre	12.44
Rye, grain and straw per acre	10.30
Barley, grain and straw per acre	14.40
Corn, grain and stalk per acre	17.28

This table shows that the average value per acre of both grain and straw, etc., of each of the six crops was as follows: Wheat $11.98, Oats $12.44, Rye $10.30, Barley $14.40 and Corn $17.28. In this case corn was worth the most and rye the least. As straw and stalks were placed at the same value in both cases the relative value of the crops of 1896 and the average crop was not affected by the same when added to the value of the grain.

The prices per bushel given above, or used in computing the value per acre, are those actually received by the farmers for their grain when delivered at mill or elevator.

The apparently high value shown of straw, etc., is partly accounted for by the fact that a large proportion of the returns included were from farmers living in the southern or eastern parts of the state where these products are in greater demand and therefore command a higher price.

Regarding the factors which enter into the Cost of Production the following explanations may be added: While the rate of wages used is the rate paid in 1896, it was found to correspond closely to the average rate during the six year period. During a few years previous to 1896 there had been a gradual fall in wages. In 1896, however, there was an upward tendency. The effect of this was to largely counteract the former fall. Hence the small difference between the wages of that year and the average wage.

The time required for performing the various parts of the labor involved is, in some cases, that of 1896, and in others the average for a series of years as observed by the farmers. Between the two, however, there was little or no difference in the time reported. This probably indicates that during the last few years there have been few, if any, improvements in either the machinery used or in other methods of production. The reports frequently referred to a new style of cornharvester which had proved a success, but this had not come into general use.

The value reported of land and horses was that of 1896. As this was in the midst of a severe agricultural depression, and as the prices of horses have been gradually doing down, it is likely that the value given was somewhat lower than the average value of same for the period covered, although the difference is likely to be very small. As to machinery and tools the value reported will correspond closely to the average value. Regarding the rate of depreciation and interest there are also good reasons for believing they have undergone no radical change during the last few years.

Of seed and the grain used for feed or maintenance of horses, the prices upon which the cost of same are based are those of the average for the period covered. As the average prices of all the crops, except wheat, is higher than the price of 1896, the cost of these items for these crops as shown, is higher than would have been the case had the prices of that year been made the basis. The difference, however, is not great.

In arriving at the cost per acre of threshing, shelling and marketing, the average yield instead of the yield of 1896 was used. As a result of this the cost per acre of these items, particularly of threshing and shelling, is a few cents lower than would have been the case had the cost been based on the yield of 1896. As the cost per bushel, as shown above, will practically apply in either case, the cost for 1896 may be ascertained by substituting the yield of that year for the yield given.

Taxes: The amount paid per bushel for threshing, machine and shelling, also the items included under "Other expenses," are those for 1896. Nothing developed, however, to indicate that the expenses covered by these items vary so much from year to year as to materially affect the cost per acre. In common with the other expenses mentioned these may, therefore, be used in the average cost, as well as for the cost of 1896.

In figuring out the cost per bushel from the cost per acre, as explained and as presented in the following tables, the average yield was also used in each case. The result of this was a slightly higher cost per bushel than if based on the larger yield. As in the case just mentioned, practically, the exact cost for 1896 may be obtained by substituting the yield of that year. It will be noticed, however, that the difference in the two instances is almost too small to deserve notice.

While the data thus collected and used relate directly to the conditions in 1896 only, there are good reasons for believing that it applies equally as much to the other years, and that cost computed from it represents a fair average for the period covered. In fact many farmers stated that the cost per acre has remained at about the same point for several years. Of course there are necessarily some variations even outside of those explained here. Under normal conditions, however, they will not greatly affect the results as a whole.

In order to present the average "Cost of Production," as explained above, in a more convenient form, and to show its relation to the value or selling price of the products, the following tables are included:

WHEAT.—*Cost of production per acre and bushel.*

Items.	Cost with wages for labor only.		Cost with wages for both labor and team.	
	Per acre.	Bush.	Per acre.	Bush.
	$	Cts.	$	Cts.
Plowing	.535	3.05	1.087	6.21
Harrowing, etc.	.192	1.10	.391	2.24
Seeding	.106	.61	.216	1.23
Cutting	.117	.67	.237	1.35
Shocking	.140	.80	.140	.80
Stacking	.296	1.69	.453	2.59
Threshing	.480	2.74	.480	2.74
Marketing	.240	1.37	.490	2.80
Seed	1.160	6.57	1.150	6.57
Taxes	.256	1.46	.256	1.46
Maintenace of horses	.867	4.96	....	....
Fertilizing, 2.3 loads manure	.690	3.94	.690	3.94
Other expenses	.500	2.86	.500	2.86
Depreciation on value machinery	.429	2.45	.429	2.45
Depreciation on value horses	.125	.71	....	....
Total annual investment	6.123	34.98	6.519	37.24
Interest on value of mach.......$4.29 at 6 per cent.	.257	1.47	.257	1.47
Interest on value of horses...... 1.25 at 6 per cent.	.075	.43	....	....
Interest on annual invest....$6.12 at 6 per cent. $6.52	.355	2.03	.379	2.17
Interest on value of land........$44.00 at 6 per cent.	2.640	15.09	2.640	15.09
Total cost	9.450	54.00	9.795	55.97

Investment per acre, $55.66. Yield per acre, 17.5 bushels.

From the first presentation in the above table, which is regarded as the most complete, we see that the annual investment with interest on the same and on the value of the machinery and horses used and of the rent of the land in raising wheat, foot up to $9.45 per acre. It has also been seen that the value per acre of the crops produced was $11.70 in 1896, and $10.68 on the average for the grain, and $1.30 per acre in each case for the straw.

The cost and value may thus be compared. Before this is done, however, the value of straw should either be deducted from the cost or added to the value of the grain. If deducted from the cost the same is reduced from $9.45 to $8.15 per acre.

Thus with "Cost of Production," at $8.15, and the "Value of Products" at $11.70 and $10.68, there was a surplus of value of $3.55 in 1896, and $2.53 on the average. As the capital invested or used for $55.66, these surpluses are equivalent to 6.39 and 4.55 per cent. on the same, respectively. In 1896 the surplus more than covers necessary profit, but on the average it falls below this requirement by about one and one-half per cent.

Another comparison may be of interest. The table shows the annual investment to be $6.12, and that interest on the same and on the value of machinery and horses amounted in all to 69 cents. As necessary profit is a part of the expenses and in the long run is found to equal in amount the sum paid in interest, another item of 69 cents should be included. This makes the total expense, less those arising from the use of land, $7.50 per acre. With the value of the crops, including straw, at $13.00 in 1896, and $11.98 on the average, there is a respective surplus of $5.50 and $4.48. As all expenses, except those of land, have been covered, these surpluses may be applied as rent on land and as necessary profit on the value of same. If shared alike by these two factors, as in this case it should be, the sum to each was $2.75 in 1896, and $2.24 on the average.

We see from this that if land is credited with the surplus the amount left for rent after meeting all expenses, including profits high enough for the farmer to remain in the business, was $2.75 on the crop of 1896, and an average of $2.24 on each of the six crops. Capitalized at 6 per cent. this surplus indicates that the value per acre of land for raising wheat was $45.83 in the first and $37.33 in the second case.

OATS.—*Cost of production per acre and bushel.*

Items.	Cost with wages for labor only.		Cost with wages for both labor and team.	
	Per acre.	Bush.	Per acre.	Bush.
	$	Cts.	$	Cts.
Plowing	.535	1.37	1.087	2.79
Harrowing, etc.,	.192	.49	.391	1.00
Seeding	.106	.27	.216	.56
Cutting	.117	.30	.237	.61
Shocking	.140	.36	.140	.36
Stacking	.296	.76	.453	1.16
Threshing	.680	.174	.680	1.74
Marketing	.300	.77	.620	1.59
Seed	.880	2.25	.880	2.25
Taxes	.256	.66	.256	.66
Maintenance of horses	.867	2.22	....	....
Fertilizing 2.3 loads manure	.690	1.77	.690	1.77
Other expenses	.500	1.28	.500	1.28
Depreciation on value machinery	.429	1.10	.429	1.10
Depreciation on value horses	.125	.33	....	....
Total annual investment	6.113	15.67	6.579	16.88
Interest on value of machinery...$4.29 at 6 per cent.	.257	.66	2.57	.66
Interest on value of horses........1.25 at 6 per cent.	.075	.19	....	....
Interest on annual invest.....6.11 at 6 per cent. $6.58	.355	.91	.383	.98
Interest on value of land..........44.00 at 6 per cent.	2.640	6.77	2.640	6.77
Total cost	$9.440	24.20	$9.859	25.28

Total investment, $55.65. Yield per acre, 39 bushels.

From the first presentation in the above table, which is regarded as the most complete, we see that the annual investment, including interest on the same and on the value of machinery and horses used and of the rent of land in raising oats, was $9.44. It has also been seen that the value per acre of the crops produced was $6.97 in 1896, and $10.14 on the average for the grain and $2.30 in each case for the straw.

Before cost and value is compared, the value of straw should be either deducted from the above cost or added to the value. If deducted from the cost the same is reduced from $9.44 to $7.14 per acre.

Thus, with "Cost of Production" at $7.14 and the "Value of Products" at $6.97 for the crop of 1896, and $10.14 for the average crop there is a loss of 17 cents in the first case and a profit of $3.00 in the second. As the capital invested or used amounted to $55.65, the loss in the first is .30 per cent., while in the second the profit is equivalent to 5.39 per cent. on the capital invested.

Another comparison may be of interest. The table places the annual investment at $6.11, and the sum of the interest on same and on the value of machinery and horses used, at 69 cents. If necessary profit, which in the long run is found to be equal to the amount of the interest, is also included, another item of 69 cents should be added. This brings the cost per acre, less those expenses which arise from the use of land, up to $7.49 with the value of the crops, straw included, at $9.27 in 1896, and $12.44 on the average. There is a surplus in this case of $1.78 and $4.95, respectively. As all expenses, except those of land, have been covered, these surpluses may be applied as rent on same and as necessary profits on its value. If shared alike by these two factors, as in this case it should be, the share to each was $.89 in 1896, and an average of $2.48.

We see from this that if land is credited with the surplus the amount left for rent, after meeting all expenses, including necessary profits high enough for the farmers to remain in the business, was $.89 in 1896, and an average of $2.48. This indicates that at a capitalization of 6 per cent. of these surpluses, the land was worth for raising oats only $14.83 per acre in the first case, while on the average it was worth $41.33 for this purpose.

RYE.—*Cost of production per acre and bushel.*

Items.	Cost with wages for labor only.		Cost with wages for both labor and team.	
	Per acre.	Bush.	Per acre.	Bush-
	$	Cts.	$	Cts.
Plowing	.535	2.97	1.087	6.04
Harrowing, etc.	.192	1.07	.391	2.17
Seeding	.106	.59	.216	1.20
Cutting	.117	.65	.237	1.32
Shocking	.140	.78	.140	.78
Stacking	.296	1.65	.453	2.52
Threshing	.510	2.83	.510	2.83
Marketing	.230	1.28	.470	2.61
Seed	.800	4.44	.800	4.44
Taxes	.256	1.42	.256	1.42
Maintenance of horses	.867	4.82	....	....
Fertilizing 2.3 loads manure	.690	3.83	.690	3.83
Other expenses	.500	2.78	.500	2.78
Depreciation on value of machinery	.429	2.38	.429	2.38
Depreciation on value of horses	.125	.69	....	....
Total annual invest.	$5.793	32.18	$6.179	34.32
Interest on value of machinery..$4.29 at 6 per cent.	.257	1.43	.257	1.43
Interest on value of horses......$1.25 at 6 per cent.	.075	.42	....	....
Interest on annual invest...$5.79 at 6 per cent. $6.18	.335	1.86	.359	2.00
Interest on value of land........$44.00 at 6 per cent.	2.640	14.66	2.640	14.66
Total cost	$9.100	50.55	$9.435	52.41

Investment per acre, $55.29. Yield per acre, 18 bushels.

From the first presentation in the above table, which is regarded as the most complete, we see that the annual investment, with interest on the same and on the value of the machinery and horses used and of the rent of the land in raising rye, foot up to $9.10 per acre. It has also been seen that the value per acre of the crops produced was $6.60 in 1896, and $8.10 on the average for the grain and $2.20 per acre in each case for the straw.

The cost and value may thus be compared. Before this is done, however, the value of straw should either be deducted from the cost or added to the value of the grain. If deducted from the cost the same is reduced from $9.10 to $6.90 per acre.

Thus, with "Cost of Production," at $6.90, and the "Value of Products," at $6.60 for the crop in 1896, and $8.10 for the average crop, there was a loss of $.30 in the first, and a surplus of $1.20 in the second case. As the capital invested was $55.29, the loss on the same in the first is only nominal, while the average profit in the second is 2.20 per cent. The returns from the crop of 1896, therefore, did not fully cover the cost of producing it, while the average returns of six crops brought, besides other expenses, 2.20 per cent. for the necessary profit.

Another comparison may be of interest. The table shows the annual investment to be $5.79, and that interest on the same and on the value of machinery and horses amounted in all to 67 cents. As necessary profits is a part of the expenses, and in the long run is found to equal in amount the sum paid in interest, another item of 67 cents should be included. This makes the total expense, less those arising from the use of the land, $7.13 per acre. With the average value of the crops, including straw, at $8.80 in 1896, and $10.30 on the average, there is a respective surplus of $1.67 and $3.17. As all expenses, except those of land, have been covered, these surpluses may be applied as rent on land and as necessary profit on the value of same. If shared alike by these two factors, as in this case it should be, the sum to each was $.84 in 1896, and $1.58 on the average.

We see from this that if land is credited with the surplus, the amount left for rent after meeting all expenses, including profits high enough for the farmers to remain in the business, was $.84 on the crop of 1896, and an average of $1.58 on each of the six crops. Capitalized at 6 per cent. this surplus indicates that the value per acre of land for raising rye was $14.00 in the first, and $26.33 in the second case.

BARLEY.—*Cost of production per acre and bushel.*

Items.	Cost with wages for labor only.		Cost with wages for both labor and team.	
	Per acre.	Bush.	Per acre.	Bush.
	$	Cts.	$	Cts.
Plowing	.535	1.78	1.087	3.62
Harrowing	.192	.64	.391	1.30
Seeding	.106	.35	.216	.72
Cutting	.117	.39	.237	.79
Shocking	.140	.46	.140	.46
Stacking	.296	.99	.453	1.51
Threshing	.663	2.21	.663	2.21
Marketing	.380	1.26	.770	2.57
Seed	.950	3.17	.950	3.17
Taxes	.256	.85	.256	.85
Maintenance of horses	.867	2.89	....	....
Fertilizing 2.3 loads manure	.690	2.30	.690	2.30
Other expenses	.500	1.67	.500	1.67
Depreciation on value machinery	.429	1.43	.429	1.43
Depreciation on value horses	.125	.42	....	....
Total annual investment	$6.246	20.81	$6.782	22.60
Interest on value of machinery..$4.29 at 6 per cent.	.257	.86	.257	.86
Interest on value of horses......$1.25 at 6 per cent.	.075	.25	....	....
Interest on annual invest...$6.25 at 6 per cent. $6.78	.363	1.21	.395	1.32
Interest on value of land........$44.00 at 6 per cent.	2.640	8.80	2.640	8.80
Total cost	$9.681	31.93	$10.074	33.58

Investment per acre, $55.79. Yield per acre, 30 bushels.

From the first presentation in the above table, which is regarded as the most complete, we see that the annual investment, with interest on the same and on the value of the machinery and horses used and of the rent of land in raising one acre of barley, foots up to $9.58.

It has also been seen that the value per acre of the crops produced was $8.96 in 1896, and $12.90 on the average for the barley, and $1.50 in each case for the straw.

The cost and value may thus be compared. Before this is done, however, the value of straw should either be deducted from the cost or added to the value as shown. If deducted from the cost the same is reduced from $9.58 to $8.08 per acre.

Thus, with "Cost of Production" at $8.08, and "Value of Product" at $8.96 and $12.90, there was a surplus of value of $.86 in 1896, and of $4.82 on the average. As the capital invested or used was $55.79, these surpluses were equivalent to 1.54 and 8.69 per cent. on the same, respectively.

Another comparison may be of interest. The table shows that the annual investment was $6.25 and that interest on same and on the value of machinery and horses used amounted in all to 70 cents. As necessary profit is a part of the expenses, and in the long run equals the interest on all the capital used, another item of 70 cents should be included for this purpose. This makes the total expense, less those arising from the use of land, $7.65 per acre. With the value of the crop, including straw at $10.46 for 1896, and the average at $14.40, there is a respective surplus of $2.81 and $6.75. As all expenses, except those of land, have been covered, these surpluses may be applied as interest on land and as necessary profit on the value of same. If shared alike by these two factors, as under this method it should be, the sum to each was $1.40 in 1896 and $3.38 on the average.

We see from this that if land is made the residual claimant, the surplus left for rent after meeting all expenses, including profits high enough for the farmers to remain in the business, was $1.40 in 1896, and an average for each of the six crops of $3.38. Capitalized at 6 per cent. these sums indicate that the value per acre for raising barley was $23.33 in the first and $56.33 in the second case.

CORN.—*Cost of production per acre and bushel.*

Items.	Cost with wages for labor only.		Cost with wages for both labor and team.	
	Per acre.	.Bush.	Per acre.	Bush.
	$	Cts.	$	Cts.
Plowing	.535	1.28	1.087	2.59
Harrowing, etc.	.230	0.55	.468	1.12
Planting	.143	0.34	.290	.69
Cultivating	.677	1.61	1.373	3.27
Cutting, by hand	.930	2.21	.930	2.21
Husking	1.340	3.19	1.340	3.19
Marketing	.560	1.33	1.140	2.71
Shelling	.650	1.31	.650	1.31
Seed	.080	0.19	.080	.19
Taxes	.256	0.61	.256	.61
Maintenance of horses	.867	2.07	....	....
Fertilizing 2.3 loads manure	.690	1.64	.690	1.64
Other expenses	.500	1.19	.500	1.19
Depreciation on value of machinery	.429	1.02	.429	1.02
Depreciation on value of horses	.125	0.30	....	....
Total annual investment	$7.912	18.84	$9.133	21.74
Interest on value of mach.......$4.29 at 6 per cent.	.257	.61	.257	.61
Interest on value of horses......$1.25 at 6 per cent.	.075	.18	....	....
Interest on annual invest...$7.91 at 6 per cent. $9.13.	.475	1.24	.458	1.11
Interest on value of land........$44.00 at 6 per cent.	2.640	6.28	2.646	6.28
Total cost	$11.359	27.15	$12.494	29.74

Investment per acre, $57.45. Yield per acre, 42 bushels.

From the first presentation in the above table, which is regarded as the most complete, we see that the annual investment, with interest on the same and on the value of the machinery and horses used and of the rent of the land in raising one acre of corn, foots up to $11.36.

It has also been seen that the value per acre of the crops produced was $10.56 in 1896, and $14.28 on the average for the corn and $3.00 in each case for the stalks.

The cost and value may thus be compared. Before this is done, however, the value of stalks should either be deducted from the cost or added to the value as shown. If deducted from the cost, the same is reduced from $11.36 to $8.36 per acre.

Thus, with "Cost of Production" at $8.36, and the "Value of Products" at $10.56 and $14.28, there was a surplus of value of $2.20 in 1896 and $5.92 on the average. As the capital invested or used was $57.45, these surpluses are equivalent to 3.86 and 10.30 per cent. on same, respectively.

Another comparison may be of interest. The table shows that the annual investment was $7.91, and that interest on same and on the value of machinery and horses used, amounted in all to 81 cents. As necessary profit is a part of the expenses and in the long run equals the interest on all the capital used, another item of 81 cents should be included for this purpose. This makes the total expenses, less those arising from the use of the land, $9.53 per acre. With the value of the crop, including stalks, at $13.56 for 1896, and the average at $17.28, there is a respective surplus of $4.03 and $7.75. As all expenses, except those of land, have been covered, these surpluses may be applied as rent on land and as necessary profit on the value of same. If shared alike by these two factors, as under this method it should be, the sum to each was $2.02 in 1896, and $3.87 on the average.

We see from this that, if land is made the residual claimant, the surplus left for rent after meeting all expenses, including profits high enough for the farmers to remain in the business, was $2.10 in 1896, and an average for each of the six crops of $3.96. Capitalized at 6 per cent., these sums indicate that the value per acre for raising corn, was $33.66 in the first and $64.50 in the second case.

TABLE LIV.—FACTORS OF COST AND VALUE.

It was stated in the introduction that this investigation is chiefly based upon the data obtained from 1,510 reports. We have also seen that of these reports 510 were made the basis for the foregoing calculations and analysis. These reports were the most complete. Besides this, they cover the best agricultural counties in the southern and eastern parts of the state. On the whole, therefore, they were regarded as the most important and for this reason were treated separately as well as more fully. The remaining 1,000 reports are compiled into the table covering these two pages. These reports cover most of the middle and many of the northern counties in the state; and that many of these offer fewer advantages for farming was plainly apparent from the returns.

Further explanations relating directly to the table are unnecessary. A few

Wages paid per day and month.

Items.	With Board.		Without Bo'rd		Difference.	
	Day.	Month.	Day.	Month.	Day.	Month.
Man and team of two horses	$2.06	$43.60	$2.50	$57.60	$0.44	$13.00
Labor, one man	.95	18.20	1.25	27.50	.20	9.30
Team of two horses	1.11	25.40	1.25	30.10	.19	3.70

Time needed for doing certain parts of the work.

Items.	Hours per acre.	Items.	Hours per acre.
Plowing, man and team	4.60	Shocking for grain, one man	.70
Harrowing for corn, man and team	2.00	Stacking for grain, two men	1.30
Harrowing for grain, man and team	1.70	Planting corn, man and team	1.20
Seeding for grain, man and team	1.00	Planting corn, hand, one man	2.40
Cutting for grain, man and team	1.10	Cultivating corn, man and team	6.60
		Cutting corn, two men and	2.50
		Cutting corn, hand, one man	8.10
		Cutting, av. tables	....
		Husking, etc., hand, one man	11.20

Threshing, marketing and seed.

Items.	Threshing.			Marketing.			Seed per Acre.		
								Price.	
	Bushels per day.	No. of men employed.	Per Bush for machine.	Miles of hauling.	Loads per day.	Bush. per load.	Bushels.	1896.	6 years.
Wheat	900	14	1.10	7	2	45	1.8	65	70
Corn—shelling	....	....	1.2	7	2	45	.2	30	38
Oats	1700	14	1.	7	2	75	2.8	25	36
Rye	800	14	1.10	7	2	50	1.7	40	48
Barley	1200	14	1.	7	2	50	2.2	35	43

comparisons, however, between the reports already used and as presented in table 53 and those included here may be of interest. In relation to the "Cost of Production" the following may be noticed: The figures in sections 1, 2, 3 and 6 of the two tables indicate that the expense of labor, seed, taxes, maintenance, manures, etc., was about the same in the two cases. The figures in sections 4 and 5 show that those who reported for this table farmed cheaper land and used less machinery and therefore had the lowest outlays for rent, interest and depreciation. In relation to the "Value of the Products," the figures in section 7, showing directly the yield and price, indicate that the receipts per acre of those, whose reports are included in this table were considerably below the receipts shown in the other table.

As a whole, this table shows a lower cost as well as a lower value of the products.

Acres in farms, value per acre.

Items.	Acres under cultivation.	Acres not under cultivation.	Total acres, average prices.
Acres in farms; farmers reporting	91800	72250	164050
Value per acre, average value	$45.30	$15.50	$32.00

Value of machinery and horses used.

Items.	Value per acre.	Total value
Machinery: Per acre under cultivation; total value	$3.48	$319464.00
Horses: Per acre in farms; total value	1.23	200932.00

Other items and factors of expense.

Items.	Per acre.	Total.
Taxes: Per acre in farm; total paid	$.26	$42653.00
Maintenance of horses: Per acre in farm; total cost	.70	114600.00
Manures: Loads per acre; total loads	2.00	192790.00
Manures: Price per load bought $.50; labor cost per load		$.32
Horses: Number used, 3,820; average value		$52.60

Yield per acre, price per bushel, value per acre of straw.

Items.	Yield. 1896.	Price. 1896.	Yield. 6 years.	Price. 6 years.	Value of straw reported by farmers.
	Bush.	Cents.	Bush.	Cents.	
Wheat	16	60	15	63	$1.20
Corn	37	22	35	30	2.50
Oats	36	17	34	24	2.00
Rye	15	33	14	42	1.40
Barley	28	27	26	38	1.20

TABLE LV.—"COST OF PRODUCTION" OF ONE ACRE OF WHEAT AS COMPUTED FROM THE DATA RELATING TO IT IN THE FOREGOING TABLE, OR TABLE 54.

Items of expense.		Cost acre.	Cost Bush.
			Cts.
Plowing	4.6 hours at 12.5 cents	$0.575	3.60
Harrowing, etc	1.17 hours at 12.5 cents	.212	1.33
Seeding	1 hour at 12.5 cents	.125	0.78
Cutting	1.1 hours at 12.5 cents	.138	0.86
Shocking	.7 hours at 12.5 cents	.087	0.54
Stacking, labor	2.6 hours at 12.5 cents	.325	2.03
Threshing, machine	16 bushels at 1.1 cents	.176	1.10
Threshing, labor	2.5 hours at 12.5 cents	.312	1.95
Marketing	1.8 hours at 12.5 cents	.235	1.48
Seed	1.8 bushels at 65 cents	1.170	7.31
Taxes	1 acre at 26 cents	.260	1.63
Maintenance of horses	1 acre at 70 cents	.700	4.37
Fertilizing	2 loads at 32 cents	.640	4.00
Other expenses	1 acre at 50 cents	.500	3.12
Depreciation of machinery	3.48 dollars at 10 per cent.	.348	2.17
Depreciation horses	1.23 dollars at 10 per cent.	.123	0.77
Total an. investment		$5.926	37.04
Interest on machinery	3.48 dollars at 6 per cent.	.208	1.30
Interest on horses	1.23 dollars at 6 per cent.	.074	0.46
Interest on an. invest	5.93 dollars at 6 per cent.	.356	2.23
Interest on land	32.20 dollars at 6 per cent.	1.932	12.07
Total cost		$8.496	$53.10

Total investment, $42.84. Hours for man and team, 11.5. Total hours of labor, 16, exclusive of labor on manures.

TABLE LVI.—COST OF PRODUCTION OF ON ACRE OF CORN AS COMPUTED FROM THE DATA RELATING TO IT IN TABLE NUMBER 54.

Items of expenses.		Cost acre.	Cost Bush.
			Cts.
Plowing	4.6 hours at 12.5 cents	$.575	1.55
Harrowing, etc.	2 hours at 12.5 cents	.250	0.68
Panting	1.2 hours at 12.5 cents	.150	0.41
Cultivating	5.6 hours at 12.5 cents	.700	1.89
Cutting	8.1 hours at 12.5 cents	1.012	2.74
Husking	11.2 hours at 12.5 cents	1.400	3.78
Marketing	4 hours at 12.5 cents	.500	1.35
Shelling	37 bushels at 1.2 cents	.440	1.19
Seed	1-5 bushel at 30 cents	.060	0.16
Taxes	1 acre at 26 cents	.260	0.70
Maintenance of horses	1 acre at 70 cents	.700	1.89
Fertilizing	2 loads at 32 cents	.640	1.73
Other expenses	1 acre at 50 cents	.500	1.35
Depreciation of machinery	$3.48 at 10 per cent.	.348	0.94
Depreciation of horses	$1.23 at 10 per ceht.	.123	0.33
Total an. investment		$7.658	$20.69
Interest on value of machinery	$3.48 at 6 per cent.	.208	0.56
Interest on value of horses	1.23 at 6 per cent.	.074	0.20
Interest on annual investment	7.66 at 6 per cent.	.459	1.24
Interest on value of land	32.20 at 6 per cent.	1.932	5.22
Total cost		$10.331	$27.91

Total investment, $44.57. Hours for man and team, 17.4. Total hours of labor, 36.7, exclusive of labor on manures.

PART II.

FACTORY INSPECTION.

FACTORY INSPECTION.

GENERAL INSPECTION.

The duties included under the term "Factory Inspection" are, in this state, attached to the Bureau of Labor, Census and Industrial Statistics. The law of April 12th, 1883, which created this Bureau made it the duties of its commissioner to inspect all factories and workshops and to see that the laws regarding the protection of employes against accidents, the employment of women and children, etc., are complied with and to enforce the same if necessary by prosecutions before courts.

One of the defects of this law was that it did not provide for special inspectors with duties and powers to enforce it, as it was manifestly impossible for the commissioner, in addition to his other duties, to visit every establishment in the state as often as necessary. Two years later, however, this was in a measure remedied. In 1885 the Bureau was practically reorganized and among other changes provision was made for a special inspector of factories, etc., as one of the officers of the Bureau. At the same time the laws regulating the condition of labor in factories were considerably elaborated and made more stringent. On the whole this law provided for a fairly complete system of factory inspection or factory laws, although, as only one inspector was provided for, the means of their enforcement were left inadequate.

Two years later, or in 1887, the inspection laws were again enlarged. Penalties were attached for their violation. Authority was given to appoint two inspectors instead of one; and their powers to enforce orders and prosecute offenders were increased.

Since this date other acts have been passed. Among these are the act of 1891 which raised the age at which children may be employed in factories and workshops from thirteen to fourteen years of age; the act of 1895 which relates to fire-escapes; and the act of 1897 which prohibited the sale in this state of goods made or manufactured in state prisons or penal institutions of other states. This last act, however, has been declared unconstitutional. Since 1887 no change has been made in the inspection service.

As no change in the inspection service has been made since 1887 two inspectors only can be exclusively employed in the inspection department. The duties of the inspectors embrace the enforcement of the laws relating to the employment and labor of women and children; the prevention of cruelty to minors; the means of escape from fire in factories, workshops, office buildings, hotels, assembly-halls, schoolhouses, churches, etc.; the inspection of passenger and other elevators; the protection of operatives from dangerous machinery; the sanitary condition of factories and workshops; the communication between engineer and workrooms; the outward swinging of doors in factories, hotels, schoolhouses, churches, etc.; the secure guarding of vats, pans, or other structures containing molten metals or hot liquids, and of well, stair, elevator and other openings.

While this includes most of the direct duties which devolve upon this department, it does not give any adequate idea of the amount of work involved in carrying them out. In fact, only those to whom they are familiar can fully comprehend the amount of work usually required to detect, completely establish, and enforce certain violations. Wisconsin is also a manufacturing state, being in this respect the tenth in order in the union, with her manufacturing establishments so scattered or distributed that there is not a single county which does not need the attention of the inspectors. Taking all these facts into consideration it is not hard to see that we have had our hands full, that it is no exaggeration to say, that there is more work to be done in the way of inspection than two inspectors can properly accomplish.

Of the laws or provisions included in the above summary, some are more easily enforced than others. To provide fire escapes, or to properly guard dangerous machinery is often combined with greater expenses than the party, upon whom they fall, is willing to meet at the time. In order to avoid this outlay, therefore, many take advantage of technicalities, or resort to other tactics, that not only mean delay in furnishing the improvements needed but cause this Bureau much extra work. Improvements of this nature, however, when once provided have a certain permanency about them. That is, they last for years, or at least require only little attention for some time to come.

On the other hand such violations as those of the child labor laws are much more readily corrected for the time being, but also more frequently repeated. When a child in the employ is found to be under fourteen years of age it is usually quickly discharged. In such cases, however, the abuse is corrected without any expense and hardly any inconvenience to the employer, because children above the legal age, possessing the requisite strength and skill, are usually on hand, ready to step into the vacant place at the same wage. For these reasons, and also because the children themselves, their parents and others conspire in lying as to their age, the child labor law is more often violated than any other of the factory acts. The enforcement of the child labor law, therefore, requires constant attention on the part of the inspectors. In fact more time had to be devoted to this alone than to all the other acts combined.

As our inspection service is inadequate to the amount of work to be done it was necessary, in order to bring about the best possible results, to so apportion our duties that each part of same received, as near as could be made out, its just proportion of our efforts. In order to bring this fairly about, due attention had to be given to the difference in the character of the duties. During the past two years the work of inspection was, therefore, divided into what may here be termed one general, and a number of special inspections. At the general inspection, which was begun early in 1897, attention was given to all the duties embraced in the laws and orders issued, and as far as possible enforced, for all improvements that were found necessary. At the special inspections, which were made as often as the time allowed, attention was given to child labor and such other violations which are more frequently repeated and therefore need more attention or constant vigilance on the part of the inspectors.

Places or factories, where children are employed, have been visited as often as once a month, and at each visit, every child suspected of being under fourteen years of age was not only carefully examined, but if necessary, also looked up in official, school and church records. At all inspections everything that vigilance and care could do, was done, in order to stop abuses and comply with the law; and if anything to that end has been left undone, it is because of lack of time, or of other means, and not because of carelessness or neglect on the part of the inspectors or any other officer of this Bureau.

The classification of factory inspection as "general" and "special" also made the tabulating of the reports of same much more convenient. As has been said already, the general inspection covered, as nearly as possible, all the provisions in the factory laws; and besides this, many other points, information concerning which is of interest, generally as well as from a statistical point of view. The reports of this inspection are tabulated in table I., and show as near as this could be described in tabulated form, the condition, with reference to the factory laws, of all the establishments inspected. The special inspections covered specific points only, or such as came under the provisions of child labor, and the investigation of the different charges or complaints which from time to time are made to this Bureau. The reports of the special inspection relate mostly to the labor and general condition of children sixteen years of age or under which were employed in factories, etc., throughout the state, and are presented under "Child Labor." The two inspections thus differed in many respects. It was necessary, therefore, to present or treat them separately.

The schedule used at the general inspection is presented on page 213. The inquiries in this schedule disclose the scope of the inspection and will be found interesting.

The schedule on page 213 when properly filled in shows, not only the condition of the plant with reference to the various legislative provisions, but also many other facts regarding it that are interesting from a statistical point of view. Arranged according to subject matter the questions will be found to come under one or the other of the following groups: The name of firm or corporation, place of business, and the kind of goods made or work done; the buildings used or occupied and other facts relating to the plant; hours of labor; number of employes; fire-escapes; stairways; doors; elevators; machinery, vats, etc.; the sanitary condition; improvements made; motive power; value of goods made; amount of wages paid; time in operation; accidents, orders issued, etc. Each of these groups need further explanation.

Name of firms or corporation, place of business, kind of goods made or work done. Of every inspection made these facts were reported. The reasons for this are almost too obvious to mention. Names and location serve as a directory. For this purpose they are useful not only for use in the Bureau but to many of those who receive the reports. They also aid in keeping our records complete. Unless used in some way in connection with the tabulations in this part, the condition of any particular establishment could not be ascertained or looked up. Information as to the kind of goods made or work done is absolutely necessary for a proper classification as to industries.

Attention ought here to be called to the fact that the name, location and business of the different establishments do not appear in Table I. in connection with the facts there presented, but separately and under the head of "Index to Manufacturers". The reason for this was one of convenience or rather lack of space in the table. The same "index" or "running" number, however, has been used in both cases. Anyone, therefore, who may desire the particulars of any given establishment can find them opposite the same number in

Table I. that has been used in the index opposite the name, etc., of the firm in question.

DATE OF ESTABLISHMENT.

By this is meant the year in which the establishment in question was first organized. These facts were collected and presented for two reasons: First, because there are certain provisions, such for instance, as the one which relates to the outward swinging of doors, which cannot be enforced on buildings erected previously to their passage; secondly, because facts relating to the age of a concern are interesting from a business standpoint. There are good reasons for believing that the facts shown under this head are trustworthy in practically every respect.

BUILDINGS, ETC.

The questions in this group relate to the number, height and kinds of buildings occupied, whether the plant is owned or leased by the party or parties operating it at the time, and as to whether it was in operation or idle at the time of inspection. As to buildings, the returns gave a description in detail. In the tables, however, the buildings were divided into two classes. One of these includes all buildings used, of less than three stories in height; while the other includes all buildings three or more stories high. Buildings three or more stories in height are affected by many provisions in the laws to which lower structures are not subjected. This classification will therefore be of assistance to those who may wish to ascertain whether such provisions have been complied with in all cases. Whether the plant was owned or leased, running or idle when inspected, is indicated by "initial" letters in the proper place in the table.

HOURS OF LABOR PER WEEK.

There are two questions in the schedule relating to the hours of labor. One of these is concerned with the full working time; the other with the hours of labor at the time of inspection. While this state has no legislation affecting the hours of labor, except in the absence of special agreements upon this point, the information here brought out cannot fail to be of interest. Among other things it shows that the ten hour day is not strictly adhered to in all cases. Especially is this true in many lumber and flour mills. Lumber mills are in operation during the season only and during this period they are usually crowded to their full capacity. Many flour mills are in operation both day and night, with only two shifts for every 24 hours. These questions also indicate whether the different establishments were running full or only part time at the time of inspection.

EMPLOYES.

The questions in this group relate in each case to the number of persons employed when the establishment is running in its full capacity, the number of employes classified as to sex, the total number of persons employed, the number of children between fourteen and eighteen years of age and the number of children under fourteen years of age at the time of inspection. The tables are so arranged as to show the number in each case of each establisment. These figures were gathered and compiled with special care and are valuable not only because of the laws which regulate the labor of children, but for general statistical purposes.

FIRE ESCAPES.

It will be noticed that in the schedule this question is so worded that the answers would naturally take the form of a brief description, not only of all fire escapes, such as properly come within that term, but also of all additional means that may be used as escapes in case of fire. A large proportion of the answers were also made in this way. As the styles of fire escapes used vary greatly, and as additional means may mean anything from stairways, ladders that may be raised and so utilized, to adjoining roofs or passages, these reports could not be boiled down under any convenient head and thus included in the table without taking too much space. Owing to these facts the table only shows the number of escapes with which each plant, requiring such, was provided. The original reports, however, are kept on file and can, therefore, should occasion require it, be referred to.

STAIRWAYS.

These are often of the greatest importance in cases of fire, etc. Properly constructed they usually afford one of the safest means of escape, especially when located on the outside of the buildings. Stairways are also both directly and indirectly the causes of many accidents. This is mostly the case when improperly constructed or located and when not provided with hand rails, guards in front of openings and other safety appliances. Stairways were therefore carefully reported upon. As the table shows, these reports cover their number both on inside and outside of buildings, and as to whether or not handrails were provided and all dangerous openings guarded. In most of these respects stairways come within the factory laws. Many of the orders issued by the inspectors were for improvements of one kind or another on stairways which were considered unsafe or dangerous.

DOORS.

In 1885 a law was enacted in this state which provides that all factories, workshops, churches, schoolhouses, etc., erected after the passage of said act shall be so constructed that the doors shall swing outward or both in and out. In accordance with this the inspectors have endeavored to enforce this law wherever found to be violated. In most cases they have also been successful. In cases where their efforts were not met with success the failure was generally due to inability to show that the building was erected after the passage of this law. This suggests very forcibly the fact that this law is far from what it ought to be or what is needed in this respect. As already intimated, it only affects buildings erected after it went into force. Buildings erected previously to this date, therefore, cannot be reached regardless of how much a change in the swinging of doors is needed or how many people are even in danger of their lives because the doors cannot be opened outwards. It need hardly be said that a large proportion of the factories, etc., now in use were erected before 1885. In justice to the employes in these buildings, this law ought to be amended so as to include all buildings of this nature regardless of when built. The table shows, of each establishment, whether the doors swing in or out. A careful study of these tables will, therefcre, throw much light upon the condition of our factories in this respect, and thus upon the extent of the need for such an amendment as the one suggested. The orders issued by the inspectors for the changing of doors so as to swing out, constitute by far the greatest number of all the orders made. In many cases also employers, who could not be compelled by law to make such changes, voluntarily did so when their attention was called to the risks they were running.

ELEVATORS.

All elevators, whether used for carrying freight or passengers, are embraced in the inspection laws. The elevators in every factory visited were, therefore, closely inspected and their condition reported. The inspection covered everything about them from their construction to their cables, doors, and other openings. Many improvments were found necessary to their general safety and were therefore ordered and enforced. Most of these orders affected doors and guards around other openings. But in several cases cables and other essential parts of the elevator proper had to be changed or replaced. While the tables do not show all particulars about them as completely as the original reports, they still give a fair idea of their number, condition in general and the kind of doors used.

MACHINERY, ETC.

Chapter 549, laws of 1887, provides that all belting, shaftings, gearing hoist, flywheels, elevators and drums of manufacturing establishments so located as to be dangerous to employes when engaged in their odrinary duties shall be securely guarded and fenced; that all stationaries, vats, pans or other structure containing molten metals or hot liquids shall be surrounded with proper safe-guards for preventing accident or injury to those employed at or near them. As it is the duty of this department to enforce these, as well as all other provisions mentioned in this part, the inspectors were on a constant lookout for violations of them. To enforce these provisions properly, however, is no easy matter. Much of the machinery or many of the objects included are so constructed that no safety appliance yet known can offer effective protection without lowering their usefulness for the purposes intended. What steps to take in such cases is always more or less puzzling. Often the matter has to be left where found. In the great majority of cases, however, the protection necessary could be provided without reducing to any great extent the working efficiency of the machinery in question. In such cases the laws were always enforced. The tables taken together with the orders issued show fairly well the condition of the factories in this respect.

SANITARY CONDITION.

Besides those concerning closets or toilet rooms there is only one question in the schedule bearing directly upon the sanitary condition in factories and workshops. The reason for this is, that in the law the provisions relating to it are expressed in general terms only and leaves much to the judgment of the inspectors. Sanitary rules or regulations cover, besides, so much ground, and violation of them differ so much, as to their nature, that the reports made could not be summed up under any other "head" than that used in the tables, without requiring more space than could be given to it. As it now stands the tables simply show whether proper toilet facilities are provided or not and whether the sanitary condition is good or bad. In every case, however, where the defects in the sanitary condition were of such nature, that in the opinion of the inspectors improvements could be enforced, orders to that effect were issued. Those, therefore, who may desire to learn the condition in detail may find it by examining the orders issued.

MOTIVE POWER.

The information presented in this connection consists of the number of engines and boilers used, with the indicated horse-power for each establishment; also the indicated horse-power of water, electricity and gas where these forces were used for motive power. As this state has no provisions for the inspection of boilers nor for the examination and licensing of engineers, this information was given voluntarily. It is believed, however, to be practically correct, and taken in connection with much other data that is presented in this part, it makes a valuable addition to our sources of information, regarding the manufacturing industries in this state.

IMPROVEMENTS.

By improvements in this connection is meant all expenditures for new buildings and machinery only. The cost of ordinary repairs does not come under this head. The tables show separately for each establishment the amount thus invested.

VALUE OF GOODS MADE OR WORK DONE, COST OF RAW MATERIAL, AMOUNT OF WAGES PAID IN 1896.

These facts were collected from all the establishments inspected. By value of the goods made, etc., is here meant the market value of the products of that year, or the amount for which they were actually sold. By cost of raw material is meant the stock and supplies used up or destroyed in manufactures during that year. By wages paid is, of course, meant the actual amount paid out as wages alone in turning out the above products. In table I. these figures have not been shown. The reasons for this are too obvious to need explanations. In the classification as to industries, however, they are included in full.

ACCIDENTS TO EMPLOYES.

Since factory inspection was first established in this state several efforts have been made to obtain data concerning accidents to employes. At the so-called general inspection these efforts were continued. While thus a great many facts relating to such accidents have been from time to time collected and presented, it has not been claimed that, in any one case, the data given included all the accidents that had occurred in the manufacturing industries in the state within the period covered; nor are any such claims made now for the figures presented at this time. Under the circumstances this also is precisely what might have been expected. In this state there are no provisions requiring employers to furnish or report the particulars about any accident that may have occurred to any of their employes. While many employers were, regardless of this, willing to give all the facts they happened to remember about such accidents, others did not look upon it as their duty to furnish even such facts as they might have within easy reach, and hence refused to offer any assistance in this direction. It is easy to see, therefore, that this shortsighted policy alone, which in the end is certain to operate against the best interest of all concerned, is under the circumstances enough to defeat any efforts, such as we were in position to make, to secure full and complete data concerning all accidents in the state within any given time. Besides this, the inquiries about accidents have not at any time been organized on a sufficiently broad basis to bring the best information. This important undertaking, therefore, has been rather incompletely performed. That reliable data concerning accidents is of the greatest importance, no one will deny. Without it, including their causes, character and result, it is clearly impossible to determine in what industries they mostly occur or the kind of machinery that is mostly to blame,—information that is absolutely necessary in order that proper safety appliances may be provided. Such information is also necessary in order that legislators and the public may come to a full realization of the importance of protective measures along this line, and of their rigid enforcement. No manufacturing state or nation can in the long run afford to neglect the duty of making ample provisions for the collection and presentation of complete and reliable statistics and facts concerning accidents to working people in workshops and factories.

WEEKS IN OPERATION.

For the purpose of being able to present figures that in some respects, at least, might throw some light upon the industrial condition throughout the state, it was made a part of the duties of the inspectors, when beginning their work in the early part of 1897, to obtain from each one of the plants visited, full particulars regarding the length of time said plant was in operation during the previous year. As these duties were carefully carried out, the figures given, of the business year, are reliable and may be depended upon. Considerable time, however, has necessarily elapsed between the period covered by the inquiries and the issuing of this report. For this reason they are chiefly valuable for comparative purposes.

ORDERS ISSUED.

It is generally provided that the owner or occupant of a factory or workshop who has offended against, or neglected to comply with, the factory laws shall be notified of such offense or neglect in writing; and that, if the same is not corrected or remedied within a specified time—generally thirty days—formal complaint must be lodged with the district attorney of the county in which the offense is committed or the neglect occur, whereupon that official shall proceed at once against the offenders according to law. The first step taken by the inspectors, therefore, when any such offense or neglect is discovered is to issue an order for their correction, in which the offense or neglect, as well as the corrections or changes required, are specifically described. In many cases these orders are very readily complied with. In others they are complied with after some pressure only; while some resist until the matter is placed with the district attorney.

During 1897 no prosecutions were made necessary. The prospects also are that nearly, if not quite, all of the cases this year in which the assistance of county attorneys have been had, will be adjusted out of court. It has been the policy of this department, at least during the past four years, not to prosecute until all other means of bringing about the desired improvements have failed. While this policy has been criticised in certain quarters it can be said in its support that in this way we have not failed to cause the required changes to be made in a single instance, except where our authority to act was so doubtful that for this reason legal proceedings were not thought wise. The orders thus issued will be found in full later in this part. In order to show the plant they affect the same running number has been used for the order as was used for the plant in the tables.

The facts gathered under these different heads from the various plants or establishments in the state have thus been tabulated and presented. Table I. shows in detail the particulars for each establishment visited at the general inspection, classified as to location. Table II. shows the totals for cities, villages and other places, of the plants inspected therein. The reports were also classified as to industries. For lack of space, however, the details of the classification could not be given; but in table III. the totals or summaries for each industry are presented.

It will be noticed in the tables that conditions or answers to inquiries are indicated by "letters" only. The following explanations of the meaning of these letters or of the terms for which they stand are therefore offered:

A means automatic doors.
B means bars, bad.
D means doors.
F means fair.
G means good.
I means idle, in.
L means leased.
N means no.
O means own, out.
R means running or in operation.
S means slide or sliding doors.
T means trap doors.
Y means yes.

As these abbreviations are in all cases used under "headings" suggesting the nature of the answers they will cause little or no confusion.

SCHEDULE.

Name of firm?..
Location ....
County of ....
Business ....
Established? ....
Description of plant ....
Does firm own or lease the buildings?..
Is the plant running or idle?..
If running is it full or part time?..
Hours per week running full time..
Hours per week at date of inspection..
Number of persons employed when running full capacity..............; **Number of male employes at date of inspection**..................; **Females at date of inspection** ....; **Total** ....
Number of children between the ages of 14 and 18 employed..........................
Number of children under 14 employed..
Number of escapes and additional means..
Main stairways outside,..............; **inside,** ....; **Total**................
Are all stair openings properly guarded?..
Have stairs hand-rails where necessary?..
Do main doors swing outward?..
Are doors locked or bolted during working hours?..................................
Condition, kind and number of elevators..
Are the cables in perfect order?..
Are all elevator openings properly guarded?..
Have the elevators trap or automatic doors?..
Are the wells properly guarded?..
Is all machinery, vats, pans, etc., properly guarded?..............................
Are suitable wash rooms and water closets provided?..............................
Are water closets for females separate and properly screened?......................
What is the sanitary condition of shops?..
No. of boilers,...... **No. of engines,**...... **Horse-power, [Steam**...... **Water**...... **Electricity** ....**]**
Cost of building improvements for year 1896, $..
Cost of machinery for same period, $..
Total value of raw material used in 1896, $..
Average pay roll per month, $..
Total amount of wages to Mechanics, Operatives and Manual Workers, paid in 1896, $..
Number of weeks in operation in 1896..
Have any accidents occurred at this factory since former inspection? If so, find out full particulars, if possible..
Action taken by inspector and general remarks: ....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
1...	1	3	O	R	60	60	250	150	55	205	55	0	2	1	4	Y	Y
2...	.....	1	L	..	60	60	100	10	50	60	18	0	1	....	1	..	..
3...	.....	1	L	..	48	48	22	22	.....	22	2	0	....	....	1	..	..
4...	2	3	O	..	60	60	109	109	.....	109	2	0	2	1	4	..	..
5...	4	.....	O	..	60	60	65	34	16	50	10	0	....	....	2	..	..
6...	2	.....	L	..	60	60	20	4	16	20	0	0	....	1	1	..	..
7...	1	2	L	..	60	60	30	15	.....	15	0	0	....	1	2	..	..
8...	.....	3	L	..	60	60	7	4	1	5	1	0	....	....	1	..	..
9...	.....	2	O	..	48	48	120	114	6	120	1	0	3	....	3	..	..
10...	.....	1	O	..	54	54	70	59	4	63	14	0	....	....	1	..	..
11...	13	9	O	..	60	60	1600	1300	.....	1300	0	0	....	....	18	..	..
12...	3	.....	O	..	60	60	115	115	.....	115	0	0	....	....	1	..	..
13...	.....	1	O	..	60	60	75	45	30	75	8	0	1	....	1	..	..
14...	.....	P 1	L	..	60	60	5	4	1	5	2	0	1	....	1	..	..
15...	1	.....	O	..	60	60	20	6	9	15	10	0	....	....	1	..	..
16...	.....	1	L	..	60	48	10	33	66	99	48	0	1	....	1	..	..
17...	1	1	L	..	53	53	139	121	18	139	31	0	3	....	1	..	..
18...	.....	P 1	L	..	60	60	28	3	12	15	0	0	....	1	1	..	..
19...	.....	P 1	L	..	59	59	40	16	0	16	0	0	2	....	1	..	..
20...	.....	P 1	L	..	60	60	140	90	0	90	18	2	....	....	....	....	....
21...	.....	1	L	..	60	60	7	2	5	7	0	0	1	....	1	..	..
22...	1	1	O	..	60	60	26	26	0	26	0	0	....	....	1	..	..
23...	1	3	O	..	60	60	45	30	0	30	0	0	1	1	2	..	..
24...	1	.....	L	..	60	60	18	1	11	12	2	...	1	1	2	..	..
25...	2	1	O	..	144	144	49	45	0	45	0	0	3	....	2	..	..
26...	1	.....	O	..	60	48	6	2	0	2	0	0	....	....	....	....	....
27...	1	.....	O	..	60	60	6	3	8	6	3	0	....	....	....	....	....
28...	.....	P 1	L	..	52	52	10	5	0	5	0	0	1	....	2	..	..
29...	1	2	L	..	60	60	25	25	0	25	0	0	....	....	2	..	..
30...	1	.....	L	..	60	60	25	2	17	19	.....	..	....	2	1	..	..
31...	2	.....	O	..	60	30	25	15	0	15	0	0	....	....	....	....	....
32...	.....	P 1	L	..	60	60	80	6	1	7	0	0	2	....	1	..	..
33...	.....	P 1	L	..	60	48	[illegible]	3	0	3	0	0	....	....	1	..	..
34...	.....	P 1	L	..	60	60	6	6	0	6	1	0	....	....	....	....	....
35...	1	P 1	L	..	60	60	12	7	0	7	1	0	....	....	....	....	....
36...	1	.....	O	..	60	60	5	3	0	3	0	0	....	....	1	..	..
37...	.....	2	O	..	60	60	80	80	0	80	0	0	....	....	2	..	..
38...	4	.....	O	..	60	60	300	140	0	140	2	0	....	....	2	..	..
39...	1	P 1	O	..	60	60	8	1	7	8	0	0	....	....	1	..	..
40...	.....	1	L	..	60	60	150	100	60	160	14	0	2	....	1	..	..
41...	.....	1	L	..	60	60	20	18	2	20	2	...	3	....	3	..	..
42...	2	.....	O	..	59	59	75	65	0	65	14	0	....	2	....	..	..
43...	3	3	O	..	60	60	370	368	0	368	26	0	3	....	4	..	..
44...	.....	P 5	L	..	54	54	12	12	0	12	.....	...	1	....	1	..	..
45...	.....	.....	O	..	60	60	200	.....	100	100	.....	...	....	....	....	....	....
46...	1	.....	O	..	60	60	5	2	0	2	.....	...	....	....	....	....	....
47...	1	1	O	..	60	60	50	42	6	48	8	0	1	....	1	..	..
48...	2	1	O	..	60	60	28	24	0	24	2	0	....	....	4	..	..
49...	.....	1	L	..	60	60	25	13	2	15	2	0	....	1	....	..	..
50...	2	1	L	..	60	60	7	3	0	3	0	0	....	....	2	..	..

MILWAUKEE COUNTY,

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1...	O	N	2	Y	D	Y	Y	Y	Y	G	52	N	2	1	60	....	....
2...	I	..	1	..	B	..	..	..	..	G	52	..	....	1	....	....	9
3...	I	..	1	..	D	..	..	..	..	G	52	..	1	1	10	....	....
4...	S	..	2	..	D	..	..	..	..	G	52	..	2	1	175	....	....
5...	O	..	.....	.....	.....	.....	..	..	..	G	46	..	1	1	24	....	....
6...	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	8	....	....
7...	I	..	2	..	B	..	..	..	.....	F	52	..	2	1	100	....	....
8...	I	..	.....	.....	.....	.....	.....	..	..	G	52	..	....	....	....	....	....
9...	O	..	4	Y	D	..	..	..	..	G	50	..	2	1	200	....	....
10...	O	..	1	..	D	..	..	..	..	G	52	..	....	2	....	....	17
11...	B	..	11	..	D	..	..	..	..	G	52	1	8	6	950	....	....
12...	I	..	1	..	.....	.....	..	..	.....	G	52	N	2	1	60	....	....
13...	O	..	1	..	D	..	..	..	..	G	44	..	1	1	20	....	....
14...	O	..	1	..	D	..	..	..	..	G	52	..	....	....	5	....	....
15...	O	..	1	..	B	..	..	..	..	F	51	..	1	1	40	....	....
16...	I	..	1	..	D	..	..	..	..	G	52	..	1	1	75	....	....
17...	I	..	1	..	[illegible]	..	..	..	..	G	52	..	2	1	40	....	....
18...	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	16	....	....
19...	I	..	1	..	D	..	..	..	..	G	.....	..	....	....	....	....	4
20...	I	..	1	..	B	..	..	..	.....	F	52	N	1	1	....	....	40
21...	I	..	1	..	D	..	..	..	..	G	52	..	1	1	45	....	....
22...	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	2	1	85	....	....
23...	I	..	1	..	D	..	..	..	..	F	52	..	2	1	45	....	....
24...	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	1	1	10	....	....
25...	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	2	1	500	....	....
26...	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	1	1	16	....	....
27...	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	20	....	....
28...	I	..	1	Y	D	..	..	..	..	G	.....	..	....	....	....	....	....
29...	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	9	6	1775	....	....
30...	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	25	....	....
31...	I	..	.....	.....	.....	.....	..	..	.....	G	.....	..	2	1	90	....	....
32...	O	..	1	..	D	..	..	..	.....	F	32	2	....	....	20	....	....
33...	I	..	.....	.....	.....	.....	..	..	.....	G	52	N	....	....	....	....	....
34...	O	..	.....	.....	.....	.....	..	..	.....	G	52	..	....	....	2	....	....
35...	I	..	.....	.....	.....	.....	..	..	.....	G	.....	..	1	1	12	....	....
36...	I	..	.....	.....	.....	.....	..	..	..	G	45	..	1	1	16	....	....
37...	I	..	2	..	B	..	.....	.....	..	G	52	..	....	....	....	....	....
38...	S	..	1	.....	D	..	..	..	.....	G	52	1	2	1	225	....	....
39...	I	..	.....	.....	.....	.....	..	..	..	G	52	N	1	1	20	....	....
40...	O	..	1	..	D	..	..	..	..	G	47	..	2	1	60	....	....
41...	S	..	1	..	D	..	..	..	..	F	52	..	4	1	80	....	....
42...	S	..	.....	.....	.....	.....	..	..	.....	G	52	..	3	1	75	....	....
43...	O	..	2	..	D	..	..	..	..	F	52	..	4	2	160	....	....
44...	I	..	2	..	D	..	..	..	.....	G	52	..	1	....	07	....	....
45...	.....	..	.....	.....	.....	.....	..	.....	.....	G	52	1	5	8	250	....	....
46...	I	..	.....	.....	.....	.....	.....	.....	.....	G	51	N	....	....	....	....	....
47...	I	..	1	..	B	..	..	..	..	G	52	..	....	....	20	....	....
48...	O	..	.....	.....	.....	.....	..	..	.....	G	52	1	1	2	45	....	....
49...	I	..	1	..	B	..	..	..	..	G	52	N	....	1	10	....	....
50...	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	30	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
51...	1	.....	O	R	60	60	30	18	0	18	1	0	....	....	....	....	....
52...	1	.....	O	..	60	60	10	6	0	6	0	0	....	....	1	Y	Y
53...	2	.....	O	..	60	60	170	111	35	146	42	0	....	....	3	..	..
54...	14	5	O	..	60	60	227	227	0	227	0	0	4	....	8	..	..
55...	3	.....	O	..	60	48	100	100	0	100	1	0	....	....	2	..	..
56..	1	.....	L	R	60	60	8	7	0	7	2	0	....	....	....	....	....
57..	.....	1	O	R	60	60	500	250	100	350	125	1	2	....	1	Y	Y
58..	6	2	O	..	60	48	218	110	.....	110	2	0	2	1	4	..	..
59..	1	.....	L	..	60	48	8	5	.....	5	.....	..	....	....	....	....	....
60..	1	.....	L	..	60	60	14	5	.....	5	.....	..	....	....	1	Y	Y
61..	1	1	O	..	59	59	47	19	.....	19	1	..	....	1	1	..	..
62..	.....	P 1	L	..	60	60	30	24	.....	24	2	..	1	....	1	..	..
63..	P 2	.....	L	..	60	60	25	5	15	20	2	..	....	....	1	..	..
64..	1	.....	O	..	60	60	6	6	.....	6	.....	..	....	1	....	..	..
65..	1	1	O	..	60	60	45	35	.....	35	4	..	....	....	2	..	..
66..	.....	P 1	L	..	60	48	25	25	.....	25	.....	..	2	....	1	..	..
67..	5	.....	O	..	60	60	300	265	.....	265	8	..	....	....	1	..	..
68..	.....	P 6	L	..	56	56	33	22	2	24	1	..	2	....	1	..	..
69..	5	.....	O	..	60	60	75	75	.....	75	.....	..	....	....	....	....	....
70..	4	.....	O	..	60	60	85	65	.....	65	6	2	....	....	....	....	....
71..	1	.....	O	..	60	60	100	20	.....	20	.....	..	....	....	....	....	....
72..	.....	1	O	..	60	60	18	15	.....	15	.....	..	....	....	2	..	..
73..	1	.....	O	..	60	60	5	5	.....	5	.....	..	....	....	....	....	....
74..	1	1	L	..	60	60	90	11	65	76	10	..	1	....	1	..	..
75..	.....	P 3	L	..	60	60	16	3	8	11	2	..	....	....	1	..	..
76..	2	3	O	..	60	60	45	20	.....	20	.....	..	....	....	3	..	..
77..	1	.....	L	..	60	48	95	52	30	82	29	..	1	....	1	..	..
78..	3	1	O	..	60	60	18	18	.....	18	4	..	....	....	2	..	..
79..	2	1	O	..	59	54	35	25	.....	25	.....	..	....	....	2	..	..
80..	3	.....	O	..	60	60	125	90	.....	90	2	..	....	....	....	....	....
81..	5	.....	O	..	60	54	70	56	.....	56	.....	..	....	....	1	..	..
82..	21	1	O	..	60	45	2165	2000	.....	2000	3	..	....	....	4	..	..
83..	4	.....	O	..	48	48	134	134	.....	134	.....	..	....	....	....	....	....
84..	.....	1	L	..	60	60	25	15	.....	16	4	..	....	....	1	..	..
85..	.....	P 3	L	..	60	60	7	5	2	7	1	..	1	....	1	..	..
86..	.....	1	L	..	60	60	21	20	1	21	1	..	1	....	1	..	..
87..	3	.....	O	..	60	24	10	2	.....	2	.....	..	....	1	1	..	..
88..	.....	P 1	L	..	60	60	8	8	.....	8	2	..	....	....	1	..	..
89..	1	.....	O	..	60	60	10	6	.....	6	.....	..	....	....	....	....	....
90..	4	1	O	..	60	60	100	82	.....	82	5	..	1	....	3	..	..
91..	.....	1	L	..	60	60	9	9	.....	9	.....	..	1	....	1	..	..
92..	5	.....	O	..	60	84	200	125	.....	125	.....	..	....	1	2	..	..
93..	2	.....	O	..	60	48	35	5	.....	5	.....	..	....	....	....	....	....
94..	1	.....	O	..	48	48	6	4	.....	4	.....	..	....	....	1	..	..
95..	4	4	O	..	60	60	40	40	.....	40	.....	..	....	....	3	..	..
96..	2	.....	O	..	60	60	20	6	3	9	.....	..	....	....	1	..	..
97..	2	.....	O	..	60	48	26	26	.....	26	.....	..	....	....	1	....	....
98..	1	.....	O	..	60	60	12	12	.....	12	4	..	....	1	1	..	..
99..	1	.....	L	..	60	48	5	1	.....	1	.....	..	....	....	1	..	..
100..	2	.....	L	..	60	60	25	14	.....	14	5	..	....	....	....	....	....

MILWAUKEE COUNTY,—Continued.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
51...	O	..	1	Y	B	Y	.....	Y	.....	G	52	N	....	....	....	....	....
52...	S	..	1	..	B	..	Y	..	.....	G	52	..	....	....	....	....	....
53...	S	..	4	..	D	..	..	..	Y	G	52	..	....	1	....	....	60
54...	B	..	4	..	D	..	..	..	.....	G	52	1	10	9	1800	....	....
55...	I	..	1	..	D	..	..	..	.....	F	52	N	3	1	100	....	....
56..	I	N	.....	.....	.....	.....	.....	Y	.....	G	52	N	....	....	....	....	....
57..	O	..	2	Y	B	Y	Y	Y	Y	G	52	..	2	1	100	....	....
58..	I	..	4	..	G	..	..	..	.....	G	48	..	1	1	75	....	....
59..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
60..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
61..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	75	....	....
62..	S	..	1	..	S	..	..	..	.....	G	52	..	....	....	10	....	....
63..	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	15	....	....
64..	I	..	.....	.....	.....	.....	..	.....	.....	G	40	..	1	1	10	....	....
65..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	1	1	35	....	....
66..	I	..	1	..	D	..	..	..	.....	G	50	..	....	....	....	....	....
67..	S	..	.....	.....	.....	.....	..	..	.....	G	40	..	3	1	150	....	....
68..	I	..	1	..	G	..	..	..	..	G	52	..	....	....	....	....	8
69..	I	..	.....	.....	.....	.....	.....	..	.....	....	28	..	2	2	170	....	....
70..	I	..	.....	.....	.....	.....	.....	..	.....	....	28	..	2	2	170	....	....
71..	.....	.....	.....	.....	.....	.....	.....	..	.....	....	16	..	1	1	40	....	....
72..	I	..	.....	.....	.....	.....	.....	..	.....	G	52	..	....	....	....	....	....
73..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
74..	I	..	1	..	D	..	..	..	..	G	52	..	1	1	30	....	....
75..	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	15	....	....
76..	I	..	2	..	B	..	..	..	.....	G	52	..	1	1	30	....	....
77..	I	..	1	..	G	..	..	..	..	F	52	..	1	1	60	....	....
78..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	2	1	12	....	....
79..	O	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	20	....	....
80..	O	..	.....	.....	.....	.....	..	.....	.....	....	26	..	5	3	325	....	....
81..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	2	1	33	....	....
82..	S	..	4	..	B	..	..	..	.....	G	52	1	14	9	750	....	....
83..	I	..	.....	.....	.....	.....	..	..	.....	F	52	N	1	1	12	....	....
84..	I	..	1	..	D	..	..	..	.....	G	16	..	1	1	12	....	....
85..	I	..	1	..	..	..	.....	..	.....	G	52	..	....	....	....	....	....
86..	I	..	2	..	..	.....	.....	..	..	G	52	..	....	....	....	....	....
87..	I	..	.....	.....	.....	.....	..	.....	.....	G	12	..	....	1	25	....	....
88..	I	..	.....	.....	.....	.....	..	..	.....	F	52	..	....	....	....	....	....
89..	I	..	.....	.....	.....	.....	..	..	.....	G	26	..	....	1	5	....	....
90..	O	..	1	..	D	..	..	..	.....	F	52	..	3	1	75	....	....
91..	O	..	1	..	D	..	..	..	.....	F	50	..	2	1	30	....	....
92..	S	..	2	..	..	..	..	..	..	G	52	..	2	1	250	....	....
93..	S	..	.....	.....	.....	.....	..	.....	.....	G	52	..	1	1	60	....	....
94..	S	..	.....	.....	.....	.....	.....	.....	.....	G	42	..	....	....	....	....	....
95..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	3	2	120	....	....
96..	I	..	.....	.....	.....	.....	..	..	..	G	52	..	....	....	8	....	....
97..	I	..	.....	.....	.....	.....	..	.....	.....	....	24	..	2	2	135	....	....
98..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
99..	I	..	.....	.....	.....	.....	.....	..	.....	....	52	..	....	....	....	....	....
100..	I	..	.....	.....	.....	.....	..	..	.....	G	49	..	....	....	10	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
101..	.....	1	L	R	60	48	60	12	10	22	.....	...	1	....	1	Y	Y
102..	.....	P 1	L	..	60	60	20	6	14	20	.....	...	....	1	1	..	..
103..	5	3	O	..	60	45	325	200	.....	200	35	1	2	3	3	..	..
104..	2	2	O	..	60	60	75	65	.....	65	8	..	1	....	2	..	..
105..	2	.....	L	..	60	60	32	6	1	7	1	...	....	....	2	..	..
106..	1	.....	L	..	59	53	20	7	8	15	3	..	....	....	1	..	..
107..	3	4	O	..	60	48	750	525	.....	525	.....	..	2	....	10	..	..
108..	.....	1	L	..	60	48	75	5	20	25	.....	...	1	....	1	..	..
109..	.....	1	L	..	57	57	90	65	.....	65	5	..	2	....	1	..	..
110..	2	2	O	..	60	60	60	65	.....	65	.....	..	1	....	2	..	..
111..	1	.....	L	R	59	59	50	36	.....	36	12	...	....	....	2	Y	Y
112..	.....	P 1	L	R	60	60	8	4	4	8	2	...	1	....	1	..	..
113..	3	.....	O	..	60	48	20	10	.....	10	.....	...	....	2	2	..	..
114..	1	1	L	..	60	60	18	6	.....	6	.....	...	....	....	2	..	..
115..	3	.....	O	..	60	60	35	35	.....	35	2	...	....	....	....	....	....
116..	.....	P 3	L	..	60	60	5	2	.....	2	2	...	1	....	1	..	..
117..	1	.....	O	..	60	54	50	30	.....	30	2	...	....	....	....	....	....
118..	1	.....	L	..	60	60	25	7	18	25	.....	...	....	1	3	..	..
119..	2	.....	O	..	60	48	10	5	.....	5	.....	...	....	....	1	..	..
120..	1	.....	L	..	60	60	15	3	10	13	4	...	....	....	1	..	..
121..	2	.....	O	..	60	60	25	13	.....	13	.....	...	....	....	1	..	..
122..	2	2	L	..	60	60	50	50	.....	[illegible]	3	..	3	....	1	..	..
123..	1	.....	O	..	60	60	8	5	.....	5	.....	..	....	....	1	..	..
124..	4	.....	O	..	60	60	43	23	.....	23	.....	...	....	....	....	....	....
125..	.....	P 3	L	..	60	60	12	9	3	12	3	...	....	....	2	..	..
126..	1	1	O	..	144	144	72	72	.....	72	.....	...	5	....	2	..	..
127..	4	.....	O	..	60	60	125	80	.....	80	.....	...	....	....	1	..	..
128..	P 1	.....	O	..	60	40	10	1	4	5	.....	...	....	....	....	....	....
129..	.....	1	O	..	60	48	30	6	21	27	8	...	....	....	1	..	..
130..	3	.....	O	..	60	48	18	3	.....	3	.....	...	....	1	.. 1	..	..
131..	1	.....	L	..	60	48	40	12	.....	12	8	...	....	2	1	..	..
132..	P 1	.....	O	..	60	48	[illegible]	1	.....	1	.....	...	....	....	....	....	....
133..	.....	1	O	..	59	59	10	9	.....	9	.....	...	....	....	1	..	..
134..	.....	.....	O	..	60	54	30	25	.....	25	.....	...	....	....	....	....	....
135..	1	1	L	..	60	60	35	12	.....	12	.....	...	....	....	1	..	..
136..	2	.....	O	..	60	60	35	12	.....	12	.....	...	....	....	1	..	..
137..	1	.....	O	..	60	60	10	3	7	10	.....	...	....	....	....	....	....
138..	2	.....	O	..	60	40	5	1	.....	1	.....	...	....	....	1	..	..
139..	4	.....	O	..	60	60	102	102	.....	102	22	...	....	1	1	..	..
140..	1	1	O	..	60	48	14	5	.....	5	.....	...	....	1	1	..	..
141..	P 1	.....	L	..	60	60	35	6	21	27	2	...	....	....	1	..	..
142..	.....	1	L	..	60	60	120	110	7	117	.....	...	1	....	1	..	..
143..	.....	P 1	L	..	60	60	15	9	.....	9	.....	...	....	....	....	....	....
144..	.....	P 1	L	..	48	48	10	10	.....	10	1	...	....	....	1	Y	Y
145..	3	2	O	..	144	96	48	48	.....	48	.....	...	1	....	1	..	..
146..	1	.....	L	..	59	59	30	30	.....	30	.....	...	....	1	1	..	..
147..	.....	1	L	..	59	59	45	13	30	43	21	...	1	....	1	..	..
148..	2	1	O	..	48	48	60	20	.....	20	2	...	1	1	1	..	..
149..	2	.....	O	..	60	60	13	8	.....	8	.....	...	....	....	....	....	....
150..	4	2	O	..	59	59	400	250	.....	250	.....	...	2	....	2	Y	Y

MILWAUKEE COUNTY,—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
101..	I	N	1	Y	S	Y	Y	Y	Y	G	52	N	1	1	....	....	4
102..	I	..	....	....	....	....	..	..	..	G	52	..	1	1	25	....	....
103..	S	..	4	..	G	..	..	..	....	G	41	..	3	3	500	....	....
104..	I	..	1	..	D	..	..	..	....	G	52	..	1	1	75	....	....
105..	O	..	....	....	....	....	..	..	..	F	52	..	....	....	....	....	....
106..	O	..	1	..	B	..	..	..	..	F	52	..	1	1	50	....	....
107..	O	..	8	..	G	..	..	..	....	F	52	..	16	2	785	....	....
108..	O	..	1	..	B	..	..	..	..	G	45	..	....	1	....	....	5
109..	O	..	2	..	B	..	..	..	....	G	52	..	2	1	125	....	....
110..	S	..	....	....	....	....	..	..	....	G	36	..	4	1	700	....	....
111..	I	N	1	Y	S	Y	Y	....	....	G	52	N	....	....	15	....	....
112..	O	..	2	..	G	..	..	Y	Y	G	52	..	....	....	....	....	....
113..	S	..	....	....	....	....	..	....	....	G	52	..	1	1	65	....	....
114..	O	..	2	Y	B	Y	..	Y	....	G	52	..	1	1	20	....	....
115..	O	....	....	....	....	....	..	....	....	....	26	..	2	2	50	....	....
116..	O	N	1	Y	D	..Y	..	Y	....	G	52	..	....	....	2	....	....
117..	S	..	....	....	....	....	..	..	....	G	52	..	1	1	35	....	....
118..	I	..	....	....	....	....	..	..	Y	G	52	..	1	1	15	....	....
119..	S	..	....	....	....	....	..	....	....	G	52	..	1	1	30	....	....
120..	I	..	....	....	....	....	..	Y	Y	G	52	..	....	....	....	....	....
121..	I	..	....	....	....	....	..	..	....	G	52	..	1	1	35	....	....
122..	I	..	1	Y	D	Y	..	..	....	G	8	..	1	1	60	....	....
123..	S	..	....	....	....	....	..	....	....	G	26	..	1	1	15	....	....
124..	O	..	....	....	....	....	..	Y	....	G	52	..	2	1	125	....	....
125..	I	..	....	....	....	....	..	..	Y	G	62	..	1	1	20	....	....
126..	I	..	1	Y	G	Y	..	..	....	G	52	..	4	2	800	....	....
127..	S	..	....	....	....	....	..	..	....	G	35	2	4	5	250	....	....
128..	I	..	....	....	....	....	..	..	....	G	52	N	1	1	15	....	....
129..	I	..	2	Y	G	Y	..	..	Y	F	48	..	1	1	35	....	....
130..	I	..	....	....	....	....	..	..	....	G	32	..	1	1	35	....	....
131..	O	..	1	Y	B	Y	..	....	....	G	52	..	1	1	25	....	....
132..	I	..	....	....	....	....	....	....	....	G	26	..	....	....	....	....	....
133..	O	..	....	....	....	....	Y	....	....	F	52	..	1	1	20	....	....
134..	....	....	....	....	....	....	..	....	....	....	52	..	2	2	160	....	....
135..	O	N	....	....	....	....	..	Y	....	G	52	....	1	1	40	....	....
136..	I	..	....	....	....	....	..	....	....	G	....	N	....	1	10	....	....
137..	I	..	....	....	....	....	..	Y	Y	G	52	..	1	1	12	....	....
138..	I	..	....	....	....	....	..	....	....	G	36	..	1	1	20	....	....
139..	S	..	1	Y	B	Y	..	....	....	G	52	..	3	1	200	....	....
140..	I	..	....	....	....	....	....	Y	....	G	52	..	....	....	....	....	....
141..	I	..	....	....	....	....	Y	..	Y	G	52	..	....	....	10	....	....
142..	I	..	2	Y	D	Y	..	..	..	G	52	..	2	3	115	....	....
143..	I	..	....	....	....	....	..	..	....	G	52	..	1	....	4	....	....
144..	I	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
145..	O	..	1	Y	B	Y	Y	..	....	G	52	..	5	2	800	....	....
146..	S	..	....	....	....	....	..	..	....	G	52	1	1	2	50	....	....
147..	I	..	1	Y	D	Y	..	..	Y	F	52	N	1	....	....	....	4
148..	I	..	1	..	D	..	..	..	....	G	50	..	2	1	100	....	....
149..	....	....	....	....	....	....	..	....	....	....	52	..	1	1	10	....	....
150..	O	N	2	Y	B	Y	..	Y	....	G	52	..	3	1	225	....	....

MILWAUKEE,

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
151..	1	.....	O	R	60	60	8	4	.....	4	.....	...	....	....	....	....	....
152..	1	.....	O	..	60	60	5	2	.....	2	.....	...	....	1	....	Y	Y
153..	.....	P 1	L	..	60	60	9	4	5	9	2	...	....	2	2	..	..
154..	3	.....	O	..	60	40	90	30	.....	30	.....	...	....	....	2	..	..
155..	.....	P 1	O	..	60	60	50	50	.....	50	4	...	....	1	....	..	..
156..	.....	P 1	O	..	60	60	30	18	12	30	10	...	....	....	1	..	..
157..	2	.....	O	..	60	60	5	5	.....	5	.....	...	....	1	1	..	..
158..	1	1	O	..	60	60	55	50	.....	50	9	...	....	....	2	..	..
159..	3	.....	O	..	120	120	96	96	.....	96	27	...	....	....	....	....	....
160..	.....	P 1	L	..	60	60	6	6	.....	6	.....	...	....	....	....	....	....
161..	.....	P 1	L	..	54	54	100	.....	100	100	55	1	1	1	1	Y	Y
162..	.....	P 2	L	..	54	54	36	34	2	36	.....	...	2	....	2	..	..
163..	1	4	O	..	60	60	15	15	.....	15	.....	...	....	....	3	..	..
164..	.....	2	L	..	60	60	6	6	.....	6	.....	...	....	....	3	..	..
165..	3	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	3	..	..
166..	.....	1	O	R	60	60	5	4	.....	4	.....	...	....	....	1	Y	Y
167..	6	1	O	..	60	60	500	375	.....	376	26	...	....	....	4	..	..
168..	1	.....	O	..	60	51	100	40	.....	40	.....	...	....	....	....	....	....
169..	5	7	O	..	60	60	309	309	13	322	22	...	2	....	4	Y	Y
170..	1	.....	O	..	60	60	25	16	.....	16	1	...	....	....	....	....	....
171..	.....	1	O	..	60	60	173	28	145	173	100	...	1	....	1	Y	Y
172..	.....	P 1	L	..	60	60	12	3	5	8	.....	...	....	....	1	..	..
173..	1	2	O	..	144	144	15	15	.....	15	.....	...	....	....	1	..	..
174..	5	2	O	..	60	50	400	250	125	375	165	...	3	....	4	..	..
175..	1	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....
176..	4	6	O	..	60	60	32	32	.....	32	.....	...	2	....	6	Y	Y
177..	.....	1	O	..	60	60	226	217	9	226	21	...	1	....	1	..	..
178..	2	.....	O	..	60	60	35	31	.....	31	5	...	....	....	1	..	..
179..	8	2	O	..	60	60	34	34	.....	34	2	...	....	....	3	..	..
180..	1	.....	L	..	60	60	70	63	7	70	4	...	....	....	....	....	....
181..	.....	P 1	L	..	59	59	10	10	.....	10	2	..	1	....	1	Y	Y
182..	1	.....	L	..	60	51	10	8	.....	8	2	...	....	....	1	..	..
183..	1	.....	L	..	60	60	5	2	.....	2	1	...	....	1	2	..	..
184..	1	1	O	..	54	54	72	10	51	61	9	...	1	....	1	Y	Y
185..	1	.....	O	..	60	60	26	26	.....	26	.....	...	....	1	1	..	..
186..	.....	1	O	..	48	48	260	140	85	225	35	...	....	....	1	..	..
187..	.....	P 1	L	..	60	60	80	80	.....	80	.....	...	2	....	1	..	..
188..	2	.....	O	..	60	60	10	8	4	12	4	...	....	....	1	..	..
189..	2	.....	O	..	60	60	35	35	.....	35	.....	...	....	....	....	....	....
190..	.....	P 1	L	..	60	30	14	.....	14	14	10	...	....	....	1	Y	Y
191..	3	1	O	..	60	48	8	8	.....	8	.....	...	....	....	1	..	..
192..	2	.....	O	..	60	54	60	42	.....	42	2	...	....	....	1	..	..
193..	.....	P 1	L	..	54	64	20	18	.....	18	2	...	1	....	2	..	..
194..	2	.....	O	..	60	60	50	30	.....	30	2	...	....	....	6	..	..
195..	2	.....	O	..	60	48	27	27	.....	27	1	...	....	....	1	..	..
196..	3	1	O	..	60	48	80	38	.....	38	9	...	....	2	2	..	..
197..	1	1	L	..	54	54	80	65	15	80	12	...	....	....	1	..	..
198..	.....	P 1	L	..	54	54	40	36	.....	36	4	...	2	....	2	..	..
199..	2	.....	O	..	60	48	66	66	.....	66	.....	...	....	....	1	..	..
200..	1	.....	O	..	60	60	24	14	.....	14	.....	...	....	....	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
151..	I	N	....	....	....	....	Y	Y	....	G	52	N	....	....	....	....	....
152..	O	..	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
153..	I	..	....	....	....	....	Y	Y	Y	G	52	..	1	1	10	....	....
154..	O	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
155..	I	..	1	Y	A	Y	Y	..	....	G	52	..	1	1	40	....	....
156..	I	..	1	..	A	..	..	..	Y	G	49	..	1	1	40	....	....
157..	O	..	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
158..	I	..	1	Y	B	Y	Y	Y	....	F	52	..	2	2	100	....	....
159..	I	..	....	....	....	....	..	..	....	F	52	..	2	1	35	....	....
160..	I	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
161..	O	..	1	Y	D	Y	Y	..	Y	G	40	..	....	1	....	....	8
162..	I	..	1	..	G	..	....	..	..	G	38	..	1	1	16	....	....
163..	I	..	....	....	....	....	Y	..	....	G	52	..	2	1	75	....	....
164..	I	..	....	....	....	....	..	..	....	....	52	..	1	1	30	....	....
165..	S	..	....	....	....	....	..	....	....	G	52	..	1	1	35	....	....
166..	I	N	1	Y	A	Y	Y	Y	....	G	52	N	1	....	....	....	....
167..	S	..	2	..	G	..	..	..	....	G	48	..	2	1	250	....	....
168..	I	..	....	....	....	....	..	....	....	F	52	..	1	1	22	....	....
169..	O	..	4	Y	D	Y	..	Y	....	F	52	..	8	2	225	....	....
170..	I	..	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
171..	O	..	1	Y	A	Y	Y	Y	Y	G	52	..	1	2	50	....	....
172..	I	..	....	....	....	....	..	..	..	G	52	..	1	1	20	....	....
173..	I	..	....	....	....	....	..	..	....	G	47	..	3	1	300	....	....
174..	O	..	2	Y	D	Y	..	..	Y	G	52	..	3	1	60	....	....
175..	I	..	....	....	....	....	....	....	....	G	36	..	....	....	....	....	....
176..	I	..	....	....	....	....	Y	Y	....	G	42	..	4	1	125	....	....
177..	O	..	4	Y	D	Y	..	..	Y	G	52	..	3	3	385	....	....
178..	I	..	....	....	....	....	..	..	....	G	52	..	1	....	6	....	....
179..	I	..	....	....	....	....	..	..	....	G	52	..	1	1	54	....	....
180..	S	..	....	....	....	....	..	..	Y	G	52	..	1	1	75	....	8
181..	O	..	1	Y	G	Y	..	..	....	G	52	..	....	....	10	....	....
182..	I	..	....	....	....	....	..	..	....	G	52	..	1	....	3	....	....
183..	O	..	....	....	....	....	..	....	....	G	52	..	1	1	20	....	....
184..	I	..	1	Y	B	Y	..	Y	Y	G	48	..	1	....	20	....	....
185..	O	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
186..	O	..	1	Y	D	Y	Y	..	Y	G	52	..	....	1	2	....	....
187..	I	..	1	..	B	..	..	..	....	F	52	..	3	1	250	....	....
188..	I	..	2	..	B	..	..	....	....	F	52	..	3	1	15	....	....
189..	....	..	....	....	....	....	..	....	....	....	52	..	1	1	40	....	....
190..	O	..	1	Y	D	Y	....	Y	Y	G	50	..	....	....	H	....	....
191..	O	..	1	..	D	..	Y	....	....	G	52	..	1	....	H	....	....
192..	O	..	....	....	....	....	..	Y	....	F	52	..	1	1	50	....	....
193..	O	..	1	Y	A	Y	..	..	....	G	52	..	....	....	8	....	....
194..	I	..	1	..	B	..	..	..	....	G	52	..	1	1	14	....	....
195..	I	..	1	..	B	..	..	..	....	F	52	..	1	2	10	....	....
196..	S	..	....	....	....	....	..	....	....	G	52	..	2	1	140	....	....
197..	I	..	1	Y	D	Y	..	Y	Y	G	52	..	2	1	75	....	....
198..	O	..	1	..	A	..	..	..	....	G	52	..	....	....	16	....	....
199..	I	..	2	..	G	..	..	..	....	F	52	..	1	3	120	....	....
200..	I	..	....	....	....	....	..	....	....	F	52	..	1	1	10	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
201..	2	.....	O	R	60	60	11	11	.....	11	.....	...		....	2	Y	Y
202..	3	.....	O	..	60	60	12	3	3	6	.....	...	....	....	2	..	..
203..	P 1	.....	L	..	60	60	8	2	4	6	.....	...	....	1	1	..	..
204..	1	.....	O	..	60	30	6	1	.....	1	.....	...	....	....	.....	.....	.....
205..	2	.....	O	..	60	60	18	7	.....	7	.....	...	....	....	1	Y	Y
206..	1	.....	O	..	60	60	5	1	.....	1	.....	...	....	....	1	..	..
207..	.....	1	O	..	60	48	110	30	15	45	4	...	1	....	2	..	..
208..	3	1	O	..	60	60	40	[illegible]	.....	40	.....	...	3	....	2	..	..
209..	.....	P 1	L	..	59	59	15	14	1	15	2	...	1	....	2	..	..
210..	1	.....	O	..	60	48	8	4	.....	4	.....	...	....	....	1	..	..
211..	1	.....	L	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
212..	2	.....	O	..	60	54	15	12	.....	12	1	...	....	....	1	..	..
213..	1	.....	L	..	60	60	6	6	.....	6	2	...	....	1	1	..	..
214..	.....	1	L	..	60	60	12	12	.....	12	.....	...	1	....	1	..	..
215..	1	.....	O	..	60	48	3	3	.....	3	.....	...	....	....	.....	.....	.....
216..	3	.....	O	..	59	59	26	26	.....	26	.....	...	....	....	2	Y	Y
217..	.....	1	O	..	60	60	21	11	10	21	.....	...	1	....	1	..	..
218..	.....	1	L	..	48	48	75	.....	75	75	26	...	1	....	1	..	..
219..	P 1	.....	L	..	60	60	5	3	.....	3	.....	...	....	1	1	..	..
220..	1	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	1	..	..
221..	2	.....	L	R	60	60	35	30	.....	30	.....	...	....	....	.....	.....	.....
222..	.....	1	L	..	60	48	40	30	.....	30	10	...	1	....	2	Y	Y
223..	1	.....	O	..	60	40	100	30	70	100	35	...	....	....	3	..	..
224..	2	.....	O	..	60	60	14	7	.....	7	.....	...	....	1	1	..	..
225..	1	.....	O	..	60	60	8	8	.....	8	.....	...	....	....	[illegible]	..	..
226..	.....	1	O	..	60	60	39	39	.....	39	.....	...	....	....	2	..	..
227..	.....	1	O	..	60	60	70	70	1	71	3	...	1	....	1	..	..
228..	.....	1	L	..	60	60	15	8	7	15	2	...	1	....	1	..	..
229..	2	.....	O	..	60	60	150	90	.....	90	.....	...	....	1	....	..	..
230..	1	.....	O	..	60	60	14	14	.....	14	1	...	....	1	1	..	..
231..	2	2	O	..	60	60	40	20	.....	20	.....	...	....	....	2	..	..
232..	6	.....	O	..	60	60	85	85	.....	85	3	...	....	1	2	..	..
233..	.....	1	O	..	60	60	40	22	.....	22	3	...	1	....	1	..	..
234..	.....	1	O	..	60	48	10	6	.....	6	.....	...	1	....	1	..	..
235..	5	1	O	..	60	57	350	150	14	164	11	...	3	....	4	..	..
236..	1	.....	O	..	60	60	5	2	.....	2	1	...	....	....	1	..	..
237..	P 1	.....	L	..	60	60	5	5	.....	5	1	...	....	....	1	..	..
238..	.....	P 1	L	..	60	60	10	2	3	5	.....	...	....	....	1	..	..
239..	.....	.....	O	..	60	30	5	2	.....	2	1	...	....	1	....	..	..
240..	3	.....	O	..	60	60	20	12	.....	12	3	...	....	....	1	..	..
241..	5	.....	O	..	60	60	15	15	.....	15	.....	...	....	....	2	..	..
242..	25	.....	O	..	110	110	1615	1200	.....	1200	2	...	....	1	2	..	..
243..	1	.....	O	..	59	59	15	8	2	10	4	...	....	....	2	..	..
244..	.....	1	L	..	60	60	30	26	1	27	.....	...	1	....	1	..	..
245..	2	.....	O	..	60	60	12	8	.....	8	1	...	....	....	.....	.....	.....
246..	3	.....	O	..	60	30	100	50	.....	50	3	...	1	1	1	..	..
247..	2	.....	O	I	60	....	6	.....	.....	.....	.....	...	....	....	1	..	..
248..	2	.....	O	R	60	60	15	5	.....	5	.....	...	....	....	2	..	..
249..	.....	P 1	L	..	60	60	40	5	14	19	8	...	1	....	1	..	..
250..	.....	1	O	..	60	60	26	19	7	26	9	...	2	....	2	..	..

MILWAUKEE COUNTY,—Continued.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
201..	I	N	1	Y	B	Y	Y	Y	.....	G	52	..	....	....	....	....	....
202..	I	..	.....	.....	.....	.....	..	..	Y	G	52	..	1	1	10	....	....
203..	I	..	.....	.....	.....	.....	.....	..	..	G	52	..	....	....	....	....	....
204..	I	..	.....	.....	.....	.....	.....	.....	.....	G	26	..	....	....	....	....	....
205..	O	..	1	Y	D	Y	Y	Y	.....	G	48	..	1	1	20	....	....
206..	O	..	.....	.....	.....	.....	..	.....	.....	F	52	..	1	1	8	....	....
207..	I	..	2	Y	G	Y	..	Y	Y	G	52	..	....	1	4	....	....
208..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	2	3	376	....	....
209..	O	..	1	Y	A	Y	..	..	Y	G	52	..	....	....	10	....	....
210..	I	..	.....	.....	.....	.....	.....	.....	.....	G	26	..	....	....	....	....	....
211..	S	..	.....	.....	.....	.....	Y	.....	.....	F	52	..	1	1	75	....	....
212..	I	..	.....	.....	.....	.....	Y	.....	.....	G	50	..	1	1	20	....	....
213..	I	..	.....	.....	.....	.....	.....	Y	.....	G	52	..	....	....	....	....	....
214..	O	..	1	Y	B	.....	.....	.....	.....	....	52	..	1	1	18	....	....
215..	I	..	.....	.....	.....	.....	.....	.....	.....	....	26	..	1	1	10	....	....
216..	I	..	1	Y	B	Y	Y	Y	.....	G	52	..	1	1	35	....	....
217..	I	..	1	..	D	..	..	..	Y	G	45	..	1	....	....	....	2
218..	I	..	1	..	D	..	.....	..	..	G	52	..	....	....	....	....	....
219..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
220..	S	..	.....	.....	.....	.....	.....	.....	.....	G	37	..	....	....	....	....	....
221..	.....	.....	.....	.....	.....	.....	Y	.....	.....	....	52	N	2	1	20	....	....
222..	I	N	1	Y	S	Y	..	Y	.....	G	52	..	....	1	....	....	5
223..	O	..	.....	.....	.....	.....	..	..	Y	G	50	..	1	1	25	....	....
224..	I	..	.....	.....	.....	.....	.....	.....	.....	G	39	..	....	....	....	....	....
225..	I	..	.....	.....	.....	.....	Y	Y	.....	G	52	..	....	1	4	....	....
226..	I	..	1	Y	D	Y	..	..	.....	G	52	..	2	1	30	....	....
227..	S	.....	1	..	D	..	.....	..	Y	G	52	..	1	....	....	....	....
228.	I	..	1	..	B	..	Y	..	..	G	52	..	....	1	....	....	8
229..	S	..	1	..	B	..	..	..	.....	G	52	..	2	1	100	....	....
230..	I	..	.....	.....	.....	.....	..	.....	.....	F	26	..	....	....	....	....	....
231..	I	..	2	Y	B	Y	..	Y	.....	F	26	..	1	1	30	....	....
232..	O	..	.....	.....	.....	.....	..	N	.....	F	52	..	2	1	75	....	....
233..	I	..	1	Y	T	Y	..	Y	.....	G	52	..	....	....	....	....	....
234..	I	..	1	..	B	..	..	..	.....	G	52	..	1	1	20	....	....
235..	O	..	1	..	G	..	..	..	Y	G	52	1	2	1	150	....	....
236..	I	..	.....	.....	.....	.....	.....	.....	.....	G	49	N	....	....	....	....	....
237..	I	..	.....	.....	.....	.....	.....	Y	.....	G	52	..	....	....	....	....	....
238..	I	..	.....	.....	.....	.....	.....	..	Y	G	52	..	....	....	....	....	....
239..	I	..	.....	.....	.....	.....	.....	.....	.....	G	44	..	....	....	....	....	....
240..	I	..	.....	.....	.....	.....	.....	Y	.....	G	52	..	1	....	....	....	....
241..	I	..	.....	.....	.....	.....	Y	.....	.....	F	52	..	2	1	60	....	....
242..	I	..	.....	.....	.....	.....	..	Y	.....	F	52	3	60	38	6000	....	250
243..	I	..	.....	.....	.....	.....	..	..	Y	G	52	N	1	1	15	....	....
244..	I	..	1	Y	B	Y	..	..	..	G	52	..	....	1	....	....	2
245..	I	..	.....	.....	.....	.....	..	.....	.....	G	40	..	1	1	12	....	....
246..	S	..	.....	.....	.....	.....	..	Y	.....	G	40	....	....	....	....	....	....
247..	S	..	.....	.....	.....	.....	.....	.....	.....	G	40	..	....	....	....	....	....
248..	O	..	.....	.....	.....	.....	.....	.....	.....	G	44	N	1	1	40	....	....
249..	O	..	1	Y	G	Y	Y	Y	Y	G	52	..	....	....	8	....	....
250..	I	..	2	..	G	..	..	..	..	G	52	..	1	1	40	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
251..	1	.....	O	R	60	30	5	1	.....	1	.....	...	.....	.....	.....	.....	.....
252..	.....	1	L	..	60	60	200	40	60	100	26	...	2	....	2	Y	Y
253..	1	1	L	..	60	60	125	125	.....	125	14	...	2	2	2	..	..
254..	1	1	O	..	60	60	55	48	7	55	9	...	1	....	1	..	..
255..	2	.....	O	..	59	59	12	6	.....	5	.....	...	.....	....	1	..	..
256..	.....	P 1	L	..	52	52	75	68	7	75	9	...	1	....	1	..	..
257..	.....	1	O	..	60	60	20	10	6	16	.....	...	1	....	1	..	..
258..	.....	P 1	L	..	60	60	40	25	.....	25	4	...	.....	....	1	..	..
259..	.....	1	L	..	60	60	350	5	300	305	225	1	2	....	1	..	..
260..	.....	P 1	L	..	60	48	40	3	9	12	6	...	.....	....	1	..	..
261..	.....	1	L	..	54	54	8	8	.....	8	.....	...	1	....	1	..	..
262..	1	.....	O	..	60	60	10	6	.....	6	1	...	.....	....	1	..	..
263..	4	.....	O	..	59	59	60	45	.....	45	.....	...	.....	....	1	..	..
264..	.....	P 1	L	..	60	60	50	47	3	50	.....	...	1	....	1	..	..
265..	2	.....	O	..	60	60	35	25	.....	25	.....	...	.....	....	1	..	..
266..	7	5	O	..	60	60	900	605	260	865	425	...	11	....	4	..	..
267..	1	1	O	..	60	54	30	10	.....	10	.....	...	.....	....	1	..	..
268..	.....	1	L	..	60	60	80	40	30	[illegible]	16	...	1	....	1	..	..
269..	.....	P 1	L	..	60	60	40	38	2	40	6	..	1	....	1	..	..
270..	2	1	L	..	60	48	45	15	5	20	2	..	2	....	1	..	..
271..	.....	1	L	..	60	60	45	35	.....	35	3	..	.....	2	....	..	..
272..	2	.....	L	..	60	60	8	5	.....	5	1	..	.....	.....	.....	.....	.....
273..	1	.....	L	..	54	48	58	63	5	68	11	...	.....	....	1	Y	Y
274..	.....	1	L	..	60	60	20	19	.....	19	.....	..	.....	1	1	..	..
275..	.....	1	O	..	60	54	75	55	20	75	10	...	1	....	1	..	..
276..	3	.....	O	R	60	54	18	10	.....	10	.....	...	.....	.....	1	Y	Y
277..	2	.....	O	..	60	60	58	58	.....	58	6	...	.....	.....	.....	.....	.....
278..	P 1	.....	L	..	60	30	5	1	.....	1	.....		.....	.....	1	..	..
279..	P 1	.....	L	..	60	60	5	2	.....	2	2	...	.....	.....	.....	.....	.....
280..	2	4	O	..	60	60	52	52	.....	52	.....	...	3	....	9	Y	Y
281..	2	.....	L	..	60	48	80	20	10	30	4	...	.....	....	2	..	..
282..	1	.....	L	..	60	60	13	10	.....	10	.....	...	1	....	1	..	..
283..	1	.....	L	..	60	60	10	6	.....	6	.....	...	1	1	1	..	..
284..	1	.....	L	I	60	....	5	.....	.....	.....	.....	...	.....	.....	1	..	..
285..	1	.....	L	R	60	60	6	1	.....	1	.....	...	.....	.....	.....	.....	.....
286..	1	.....	O	..	60	60	6	4	.....	4	.....	..	.....	....	1	Y	Y
287..	.....	1	L	..	60	60	12	6	.....	6	.....	...	.....	....	1	..	..
288..	P 1	1	L	..	60	60	50	50	.....	50	.....	...	1	1	1	..	..
289..	5	3	O	..	60	60	16	14	.....	14	.....	...	.....	....	4	..	..
290..	1	.....	L	..	59	59	28	28	.....	28	.....	...	.....	....	1	..	..
291..	2	1	L	..	60	48	37	17	.....	17	1	...	1	....	1	..	..
292..	3	.....	O		60	54	26	26	.....	26	.....	...	.....	1	1	..	..
293..	3	.....	L	..	60	60	25	15	.....	15	2	...	.....	1	1	..	..
294..	P 1	.....	L	..	60	60	30	2	12	14	.....	...	.....	.....	.....	.....	.....
295..	10	1	O	..	60	48	130	58	.....	58	.....	...	.....	....	3	Y	Y
296..	2	1	L	..	60	60	145	146	.....	145	3	...	.....	....	1	..	..
297..	.....	P 1	L	..	48	48	200	80	120	200	81	...	2	....	2	..	..
298..	P 1	.....	O	..	60		[illegible]	5	.....	5	.....	...	.....	....	3	..	..
299..	.....	1	O	..	60	60	150	146	4	150	35	...	1	....	1	..	..
300..	.....	1	L	..	60	60	75	45	6	51	21	...	1	....	2	..	..

MILWAUKEE COUNTY,—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
251..	S	N	.....	.....	.....	.....	Y	.....	.....	G	26	N	1	1	6	....	....
252..	I	..	3	Y	B	Y	..	Y	Y	G	50	..	2	1	25	....	....
250..	I	..	2	..	B	..	..	..	.....	G	52	..	1	1	40	....	....
254..	I	..	2	..	A	..	..	..	Y	G	52	..	2	1	50	....	....
255..	I	..	.....	.....	.....	.....	..	..	.....	F	52	..	1	1	35	....	....
256..	O	..	1	Y	G	Y	..	..	Y	G	52	..	....	....	10	....	....
257..	I	..	1	..	T	..	..	..	..	G	52	..	....	1	4	....	....
258..	O	..	.....	.....	A	..	..	..	Y	G	.....	.....	....	....	10	....	....
259..	O	..	2	Y	B	Y	..	..	Y	G	50	N	2	....	45	....	....
260..	I	..	.....	.....	.....	.....	..	..	..	F	48	..	1	....	....	....	2
261..	I	..	1	Y	D	Y	.....	..	.....	G	.....	.....	....	....	....	....	....
262..	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	N	1	1	10	....	....
263..	I	..	1	Y	D	Y	..	Y	.....	G	50	..	1	1	40	....	....
264..	O	..	1	..	D	..	..	..	Y	G	52	..	....	1	10	....	....
265..		..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	50	....	....
266..	S	..	8	Y	G	Y	..	..	Y	G	50	..	8	2	650	....	250
267..	O	..	1	..	B	..	..	..	.....	G	52	....	1	1	45	....	....
268..	O	..	1	..	D	..	..	..	Y	G	50	N	....	....	....	....	....
269..	O	..	1	..	A	..	..	..	..	G	52	..	....	1	50	....	....
270..	I	..	1	..	S	..	..	..	..	G	50	..	2	1	125	....	....
271..	I	..	1	..	S	..	..	..	.....	G	49	..	....	3	6	....	....
272..	I	..	.....	.....	.....	.....	..	.....	.....	F	8	..	1	1	30	....	....
273..	I	..	.....	.....	.....	.....	..	Y	Y	G	52	..	....	2	....	....	24
274..	O	..	1	Y	D	Y	..	..	.....	G	52	..	....	....	....	....	....
275..	O	..	1	..	D	..	..	..	Y	G	44	..	1	1	60	....	....
276..	I	N	.....	.....	.....	.....	Y	.....	.....	F	47	N	1	.	60	....	....
277..	.....	.....	.....	.....	.....	.....	..	.....	.....	...	26	..	1	1	60	....	....
278..	I	N	.....	.....	.....	.....	.....	.....	.....	G	26	..	....	....	....	....	....
279..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
280	O	..	.....	.....	.....	.....	Y	Y	.....	G	52	..	8	3	400	....	....
281..	I	..	.....	.....	.....	.....	..	..	Y	F	26	..	1	1	40	....	....
282..	S	..	.....	.....	.....	.....	..	..	.....	G	52	..	2	1	200	....	....
283..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	2	250	....	....
284..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
285..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
286..	I	..	1	..	B	Y	.....	.....	.....	G	52	..	....	....	....	....	....
287..	I	..	1	..	B	..	Y	Y	.....	G	52	..	....	....	....	....	....
288..	I	..	1	..	D	..	..	..	.....	G	.....	..	1	1	30	....	....
289..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	6	2	100	....	....
290..	O	..	1	Y	B	Y	..	Y	.....	G	52	..	2	1	15	....	....
291..	I	..	1	..	T	..	..	..	.....	G	51	..	1	1	70	....	....
292..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	70	....	....
293..	S	..	.....	.....	.....	.....	..	..	.....	G	.....	..	1	1	30	....	....
294..	I	..	.....	.....	.....	.....	.....	..	Y	G	52	..	....	....	....	....	....
295..	I	..	4	Y	G	Y	Y	..	.....	G	52	1	2	1	75	....	....
296..	I	..	1	..	G	Y	Y	..	.....	G	4	N	....	1	75	....	....
297..	I	..	1	..	G	..	..	..	Y	F	52	..	3	1	125	....	....
298..	I	..	.....	.....	.....	.....	.....	..	.....	G	52	..	....	....	....	....	....
299..	I	..	1	Y	A	Y	Y	..	Y	F	52	3	1	1	30	....	....
300..	O	..	1	..	T	..	..	..	..	G	52	N	1	1	35	....	....

MILWAUKEE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
301..	P 1	.....	L	R	60	48	6	2	.....	2	.....	..	....	....	1	Y	Y
302..	1	.....	L	..	60	60	10	7	.....	7	.....	...	....	....	2	..	..
303..	2	1	O	..	60	48	80	30	.....	30	4	...	....	....	5	..	..
304..	.....	P 1	L	..	60	48	7	4	.....	4	.....	...	....	....	1	..	..
305..	.....	P 1	L	..	60	48	24	11	2	13	2	...	1	....	1	..	..
306..	1	.....	O	..	60	48	100	20	.....	20	.....	...	....	....	1	..	..
307..	1	.....	O	..	54	48	15	8	.....	8	.....	...	....	....	....	..	..
308..	3	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	2	..	..
309..	P 1	.....	O	..	60	48	20	15	.....	15	.....	...	....	....	....	....	....
310..	.....	1	L	..	54	54	100	24	60	84	11	...	1	....	1	Y	Y
311..	.....	1	O	..	60	60	65	40	.....	40	6	...	2	....	1	..	..
312..	P 1	.....	O	..	60	60	6	4	.....	4	.....	...	....	....	....	....	....
313..	2	1	O	..	60	48	115	90	.....	90	2	..	2	....	1	Y	Y
314..	2	2	O	..	60	48	150	34	.....	34	.....	...	2	....	2	..	..
315..	2	1	O	..	60	60	300	165	95	260	85	..	2	....	2	..	..
316..	1	1	L	..	60	60	100	7	5	12	3	...	....	....	2	..	..
317..	3	2	O	..	60	60	225	212	3	215	31	...	2	....	2	..	..
318..	.....	2	O	..	60	60	20	12	.....	12	.....	...	....	....	1	..	..
319..	3	8	O	..	60	48	250	97	31	128	93	...	3	1	5	..	..
320..	1	3	O	..	60	60	300	300	.....	300	85	...	....	2	....	..	..
321..	P 1	.....	O	..	60	60	15	15	.....	15	1	...	....	....	1	..	..
322..	1	.....	O	..	60	60	8	5	.....	5	.....	...	....	....	....	....	....
323..	P 1	.....	L	..	60	60	8	1	5	6	1	...	....	....	....	....	....
324..	1	.....	L	..	60	48	20	11	.....	11	.....	...	....	....	....	....	....
325..	.....	P 1	L	..	59	59	35	15	.....	15	2	...	1	....	1	Y	Y
326..	1	1	O	..	60	60	10	6	.....	6	.....	...	....	....	2	..	..
327..	.....	P 1	L	..	60	48	36	17	19	36	25	...	1	....	1	..	..
328..	9	5	O	..	60	60	100	100	.....	100	.....	...	1	....	4	..	..
329..	4	.....	O	..	60	60	35	24	7	31	8	..	....	....	1	..	..
330..	1	.....	O	..	60	36	80	30	60	80	35	..	....	....	....	....	....
331..	.....	1	L	R	60	60	35	14	5	19	4	...	1	....	1	Y	Y
332..	.....	P 1	L	..	59	59	90	30	60	90	31	...	2	....	2	..	..
333..	3	.....	O	..	60	60	45	45	.....	45	2	...	....	....	....	....	....
334..	6	.....	L	..	60	60	150	85	.....	85	1	...	....	....	2	Y	Y
335..	5	.....	O	..	54	54	30	25	.....	25	.....	...	....	....	2	..	..
336..	4	.....	O	..	60	54	190	40	.....	40	4	...	....	....	....	....	....
337..	.....	P 1	L	..	60	54	40	40	.....	40	2	...	1	....	2	Y	Y
338..	3	1	O	..	60	60	27	27	.....	27	2	...	....	....	3	..	..
339..	1	1	O	..	60	60	65	57	8	65	2	...	1	....	1	..	..
340..	1	3	O	..	60	48	75	18	.....	18	.....	...	....	....	2	....	....
341..	2	1	O	..	60	60	125	107	.....	107	.....	...	....	....	2	Y	Y
342..	4	1	O	..	48	48	200	125	.....	125	10	...	....	3	....	..	..
343..	P 1	.....	L	..	60	60	6	6	.....	6	.....	...	....	....	1	..	..
344..	8	.....	O	..	60	60	294	100	.....	100	.....	...	....	3	4	..	..
345..	5	.....	O	..	60	60	180	40	.....	40	.....	...	....	....	1	..	..
346..	.....	1	O	..	60	60	53	53	.....	53	.....	...	2	....	1	..	..
347..	1	.....	O	..	60	60	14	14	.....	14	.....	...	....	....	1	..	..
348..	2	.....	L	..	60	60	125	65	.....	65	6	...	....	....	1	..	..
349..	2	.....	O	..	60	60	40	25	.....	25	3	...	....	....	....	....	....
350..	P 1	.....	L	..	48	48	5	3	.....	3	.....	...	....	....	1	Y	Y

MILWAUKEE COUNTY,—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
301..	I	N	....	....	....	....	....	....	....	G	26	N	....	....	....	....	....
302..	S	..	....	....	....	....	Y	Y	....	G	52	....	....	1	25	....	....
303..	I	..	1	Y	B	Y	..	..	....	G	52	N	1	1	25	....	....
304..	I	..	....	....	....	....	..	..	....	G	52	..	....	1	....	....	2
305..	I	..	1	Y	D	Y	..	..	Y	G	52	..	1	1	15	....	....
306..	I	..	....	....	....	....	Y	....	....	F	52	..	1	1	35	....	....
307..	S	..	....	....	....	....	..	....	....	G	40	..	....	....	....	....	....
308..	O	..	1	Y	B	Y	..	....	....	G	52	..	1	1	20	....	....
309..	I	..	....	....	....	....	..	Y	....	G	50	..	1	1	35	....	....
310..	I	..	1	Y	S	Y	....	..	....	G	52	..	....	....	....	....	....
311..	I	..	2	..	B	..	Y	..	....	G	52	..	2	2	75	....	....
312..	I	..	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
313..	I	..	1	Y	D	Y	Y	Y	....	F	42	..	2	1	65	....	....
314..	I	Y	2	..	D	..	..	..	....	G	52	..	2	1	85	....	....
315..	O	N	1	..	T	..	..	..	Y	G	42	..	2	1	80	....	....
316..	O	..	1	..	S	..	..	..	..	G	....	....	1	1	75	....	....
317..	I	..	1	..	S	..	..	..	..	F	46	N	2	1	75	....	....
318..	S	..	....	....	....	....	N	..	....	G	....	..	1	1	30	....	....
319..	I	..	2	Y	D	Y	Y	..	Y	F	52	..	1	1	....	150	....
320..	I	..	1	..	S	..	..	..	....	G	4	2	2	1	150	....	....
321..	I	..	....	....	....	....	..	..	....	G	52	N	1	1	8	....	....
322..	....	....	....	....	....	....	....	....	....	F	26	....	....	....	....	....	....
323..	....	....	....	....	....	....	Y	Y	Y	G	52	N	1	1	10	....	....
324..	S	N	....	....	....	....	..	....	....	G	52	..	1	1	12	....	....
325..	O	..	1	Y	D	Y	..	Y	....	G	52	..	....	3	9	....	....
326..	I	....	....	....	....	....	..	..	....	G	52	..	....	....	....	....	....
327..	O	N	1	Y	T	Y	Y	..	Y	G	52	..	....	....	4	....	....
328..	I	..	1	..	G	..	..	..	....	G	52	....	5	2	100	....	....
329..	I	..	....	....	....	....	..	..	Y	G	52	N	....	1	45	....	....
330..	S	..	....	....	....	....	..	..	..	G	52	..	....	2	21	....	....
331..	I	N	1	Y	B	Y	Y	Y	Y	F	52	N	1	1	10	....	....
332..	O	..	1	..	A	..	..	..	..	G	52	....	....	....	6	....	....
333..	....	....	....	....	....	....	..	....	....	....	26	....	2	1	200	....	....
334..	I	N	....	....	....	....	..	Y	....	G	52	N	2	1	130	....	80
335..	S	..	....	....	....	....	..	..	....	G	52	..	1	2	37	....	....
336..	S	..	....	....	....	....	..	....	....	G	52	..	1	1	100	....	....
337..	I	..	1	Y	G	Y	..	Y	....	G	52	..	....	....	10	....	....
338..	I	..	1	..	D	..	..	..	....	G	52	..	2	1	80	....	....
339..	I	..	1	..	B	..	..	..	Y	G	52	..	1	1	50	....	....
340..	....	....	....	....	....	....	..	....	....	F	40	..	2	2	300	....	....
341..	I	N	....	....	....	....	..	....	....	F	40	..	4	3	500	....	....
342..	I	..	2	Y	G	Y	..	Y	....	G	40	..	2	1	125	....	....
343..	I	..	....	....	....	....	..	....	....	G	52	..	....	2	22	....	....
344..	O	..	....	....	....	....	..	Y	....	G	52	..	4	6	156	....	....
345..	O	..	....	....	....	....	..	....	....	G	52	1	2	3	200	....	....
346..	I	..	....	....	....	....	..	Y	....	G	52	2	18	14	925	....	....
347..	I	..	....	....	....	....	..	..	....	G	52	N	4	6	2000	....	....
348..	I	..	1	Y	D	Y	..	..	....	G	16	..	2	1	50	....	....
349..	S	..	....	....	....	....	..	..	....	G	52	..	1	1	150	....	....
350..	I	..	....	....	....	....	..	....	....	G	60	....	....	....	2	....	....

MILWAUKEE,

	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.							STAIRWAYS.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
351..	9	.....	O	R	60	60	125	126	.....	125	.....	...	....	2	4	Y	Y
352..	.....	1	L	..	60	48	20	5	.....	5	.....	...	1	....	1	..	..
353..	8	7	O	..	60	60	500	460	.....	460	18	...	3	1	6	..	..
354..	5	.....	O	..	60	48	100	12	.....	12	1	...	....	....	....	....	....
355..	4	.....	O	..	60	60	22	22	.....	22	.....	...	....	1	1	Y	Y
356..	.....	1	L	..	49	49	100	80	.....	80	12	...	2	....	1	..	..
357..	2	2	O	..	60	60	105	106	.....	106	.....	...	3	1	3	..	..
358..	5	.....	O	..	60	60	175	151	.....	151	11	...	....	....	1	....	....
359..	2	.....	O	..	54	54	60	25	.....	25	2	...	....	....	....	....	....
360..	.....	1	L	..	60	60	45	28	.....	28	1	...	....	....	2	Y	Y
361..	.....	P 1	L	..	60	60	75	12	46	58	32	2	1	....	1	..	..
362..	.....	1	L	..	60	60	15	6	4	10	.....	...	....	....	1	..	..
363..	1	.....	L	..	59	59	9	9	.....	9	1	...	....	1	....	..	..
364..	2	.....	O	..	45	45	40	11	23	34	.....	...	....	....	2	..	..
365..	P 1	1	L	..	60	48	45	5	.....	6	.....	...	2	....	2	..	..
366..	1	.....	O	..	60	48	100	5	.....	5	.....	...	....	....	....	....	....
367..	1	.....	O	..	60	60	40	26	.....	26	.....	...	....	....	1	Y	Y
368..	1	.....	O	..	60	60	49	49	.....	49	.....	...	....	1	2	..	..
369..	.....	P 1	L	..	40	40	5	1	2	3	3	...	....	1	....	..	..
370..	3	.....	L	..	60	60	60	25	2	27	7	...	....	....	2	..	..
371..	.....	P 1	L	..	60	60	.....	.....	.....	.....	.....	...	1	....	....	..	..
372..	.....	P 1	L	..	60	48	16	8	.....	8	1	...	1	....	1	..	..
373..	2	.....	O	..	60	60	11	11	.....	11	1	...	....	1	1	..	..
374..	3	.....	O	..	60	60	30	8	4	12	.....	...	....	....	1	..	..
375..	4	.....	O	..	60	44	100	77	75	152	58	...	....	....	2	..	..
376..	.....	P 1	L	..	60	60	30	5	22	27	5	...	2	....	1	..	..
377..	P 1	.....	O	..	54	54	8	8	.....	8	2	...	....	....	1	..	..
378..	1	.....	O	..	60	60	25	18	.....	18	6	...	....	1	2	..	..
379..	.....	1	L	..	60	60	18	18	.....	18	.....	...	....	....	1	..	..
380..	1	.....	L	..	60	60	8	6	.....	6	.....	...	....	....	1	..	..
381..	2	.....	O	..	60	60	12	6	.....	6	.....	...	....	1	1	..	..
382..	2	1	O	..	60	60	169	139	30	169	39	1	1	1	1	..	..
383..	P 1	.....	L	..	69	69	10	10	.....	10	.....	...	....	....	1	..	..
384..	P 1	.....	L	..	50	60	16	5	10	15	.....	...	....	2	1	....	....
385..	4	.....	O	..	60	60	35	15	.....	15	.....	...	....	....	1	Y	Y
386..	.....	1		R	60	60	25	16	3	19	2	...	....	....	2	Y	Y
387..	8	P 1	L	..	60	60	30	30	.....	30	.....	...	....	1	4	..	..
388..	2	.....	L	..	60	60	22	13	.....	13	5	...	....	....	....	....	....
389..	.....	1	L	..	60	60	140	60	80	140	16	...	2	....	1	Y	Y
390..	3	2	O	..	59	50	400	60	240	300	125	...	1	....	2	..	..
391..	2	1	L	..	60	48	30	20	.....	20	3	...	....	3	2	..	..
392..	.....	1	.....	..	60	60	350	75	200	275	45	...	3	....	3	..	..
393..	P 1	.....	O	..	60	60	18	3	15	18	.....	...	....	1	1	..	..
394..	1	.....	L	..	48	48	28	28	.....	28	.....	...	....	....	1	..	..
395..	.....	1	L	..	54	54	30	18	12	30	6	...	1	....	1	..	..
396..	2	2	L	..	60	60	150	160	.....	160	3	...	1	....	2	..	..
397..	P 1	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....
398..	1	.....	O	..	60	60	19	10	.....	10	1	...	....	....	1	Y	Y
399..	2	1	O	..	60	54	105	40	.....	40	2	...	1	....	2	..	..
400..	1	.....	O	..	60	60	18	3	10	13	.....	...	....	1	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number.	DOORS.		ELEVATORS.				Machinery vats and pan guarded.	CLOSETS.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	HORSE-POWER.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
351..	O	N	2	Y	B	Y	Y	Y	.....	F	52	N	6	5	365	....	....
352..	O	..	1	..	A	..	..	..	.....	G	42	..	1	1	35	....	....
353..	O	..	5	..	A	..	..	..	.....	G	52	1	4	2	200	....	....
354..	O	..	.....	.....	.....	.....	..	..	.....	G	52	N	1	1	30	....	....
355..	I	..	.....	.....	.....	.....	..	.....	.....	F	36	..	2	1	100	....	....
356..	O	..	1	Y	B	Y	..	Y	.....	G	52	..	2	1	85	....	....
357..	O	..	.....	.....	.....	.....	..	..	.....	G	40	..	2	1	212	....	....
358..	.....	.....	.....	.....	.....	.....	..	..	.....	G	12	..	1	1	60	....	....
359..	S	N	.....	.....	.....	.....	..	.....	.....	G	50	..	1	1	15	....	....
360..	I	..	1	Y	B	Y	..	Y	.....	G	52	..	....	2	35	....	....
361..	I	..	2	..	D	..	..	..	Y	G	52	..	....	1	10	....	....
362..	I	..	1	..	A	..	..	..	..	F	5	..	1	1	10	....	....
363..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
364..	I	..	.....	.....	.....	.....	Y	Y	Y	G	48	..	....	1	4	....	....
365..	O	..	1	Y	D	Y	..	.....	.....	G	25	..	....	....	....	....	....
366..	S	..	.....	.....	.....	.....	..	N	.....	G	52	..	1	1	10	....	....
367..	S	..	1	Y	B	Y	..	Y	.....	G	52	..	....	2	....	....	50
368..	S	..	1	..	T	..	..	..	.....	G	52	..	3	1	35	....	....
369..	O	..	.....	.....	.....	.....	.....	..	Y	G	52	..	....	....	....	....	....
370..	I	..	1	Y	A	Y	Y	..	..	G	51	..	1	1	50	....	....
371..	I	..	1	..	D	..	.....	..	..	G	52	..	....	....	....	....	....
372..	I	..	1	..	D	..	Y	..	.....	F	46	..	1	1	7	....	....
373..	O	Y	1	..	D	..	..	..	.....	G	52	..	1	1	30	....	....
374..	O	N	.....	.....	.....	.....	..	..	Y	G	.....	..	2	2	100	....	....
375..	I	..	2	Y	B	Y	..	..	..	G	46	..	3	1	125	....	....
376..	I	..	1	..	G	..	..	..	..	G	52	..	1	1	10	....	....
377..	I	..	.....	.....	.....	.....	..	..	.....	G	20	..	....	....	5	....	....
378..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	..	1	1	20	....	....
379..	I	..	.....	.....	.....	.....	..	N	.....	G	52	..	2	1	35	....	....
380..	O	..	1	Y	B	Y	.....	Y	.....	G	52	..	....	....	....	....	....
381..	I	..	.....	.....	.....	.....	.....	.....	.....	G	43	..	....	....	....	....	....
382..	S	..	1	Y	G	Y	Y	Y	Y	G	50	..	3	1	150	....	....
383..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	25	....	....
384..	.....	.....	.....	.....	.....	.....	..	..	Y	G	52	..	1	1	15	....	....
385..	I	N	.....	.....	.....	.....	..	..	.....	G	16	..	1	1	50	....	....
386..	O	N	1	Y	G	Y	Y	Y	Y	G	52	N	1	1	10	....	....
387..	I	..	1	..	B	..	..	..	..	G	52	..	7	3	200	....	....
388..	I	..	.....	.....	.....	.....	..	.....	.....	F	44	..	1	1	50	....	....
389..	O	..	1	Y	G	Y	..	Y	Y	G	52	..	1	1	75	....	....
390..	I	..	3	..	B	..	..	..	.....	G	52	..	3	2	100	....	....
391..	O	..	2	..	B	..	..	..	.....	G	41	.....	....	....	....	....	....
392..	O	..	2	..	A	..	..	..	..	G	52	N	3	1	30	....	....
393..	I	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	15	....	....
394..	I	..	1	Y	D	..	..	..	.....	G	52	..	1	1	12	....	....
395..	I	..	1	..	A	..	..	..	Y	G	52	..	....	1	....	....	25
396..	I	..	1	..	B	..	..	..	.....	G	52	..	1	..	75	....	....
397..	I	..	.....	.....	.....	.....	.....	.....	.....	G	38	.....	....	....	....	....	....
398..	I	..	1	Y	.....	.....	.....	.....	.....	G	52	N	....	....	....	....	....
399..	I	..	1	..	D	Y	Y	..	.....	G	48	..	3	2	125	....	....
400..	I	..	.....	.....	.....	.....	..	..	Y	G	52	..	1	1	25	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
401..	.....	9	O	R	60	60	500	300	.....	300	36	...	....	....	3	Y	Y
402..	.....	1	O	..	60	60	8	5	.....	5	.....	...	....	....	1	..	..
403..	.....	2	O	I	60	....	36	1	.....	1	.....	...	....	....	....	....	....
404..	3	2	O	R	60	48	450	150	200	350	24	...	4	2	3	Y	Y
405..	.....	3	O	..	60	60	35	35	.....	35	8	...	....	....	2	..	..
406..	.....	2	O	..	60	60	18	9	.....	9	3	...	....	....	1	..	..
407..	.....	1	L	..	60	60	15	6	.....	6	.....	...	2	....	1	..	..
408..	.....	1	O	..	60	60	14	2	5	7	.....	...	....	....	....	....	....
409..	.....	1	O	..	60	46	6	5	.....	5	.....	...	....	....	....	....	....
410..	1	1	O	..	54	54	525	195	230	425	189	...	2	....	3	Y	Y
411..	11	19	O	..	60	60	790	767	.....	767	.....	...	19	....	21	..	..
412..	.....	P 1	L	..	60	60	5	3	2	5	2	...	....	....	....	..	..
413..	1	.....	O	..	60	48	10	7	.....	7	.....	...	....	....	1	..	..
414..	1	.....	L	..	60	60	9	6	.....	6	.....	...	1	....	1	..	..
415..	.....	P 1	L	..	60	48	37	8	19	27	.....	...	....	1	1	..	..
416..	.....	1	L	..	54	54	20	10	2	12	1	...	....	....	1	..	..
417..	2	1	L	..	60	60	45	40	.....	40	3	...	1	1	1	..	..
418..	3	2	O	..	60	60	130	70	.....	70	10	...	....	1	2	..	..
419..	P 1	.....	L	..	60	54	18	1	4	5	.....	...	....	1	1	..	..
420..	.....	P 1	L	..	60	60	19	2	10	12	.....	...	....	....	1	..	..
421..	.....	P 1	L	..	60	60	50	5	20	25	1	...	....	....	1	..	..
422..	P 1	.....	L	..	60	54	30	.....	15	15	4	...	....	....	....	....	....
423..	P 1	.....	O	..	60	60	10	7	.....	7	2	...	....	....	....	....	....
424..	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	....	....	....
425..	P 1	.....	L	..	60	54	10	6	.....	6	.....	...	....	....	1	Y	Y
426..	.....	1	O	..	60	60	40	10	15	25	15	...	....	....	1	..	..
427..	1	7	O	..	60	60	683	680	3	683	18	...	10	....	8	..	..
428..	8	8	O	..	60	60	90	90	1	91	.....	..	....	1	4	..	..
429..	7	.....	O	..	60	60	108	92	.....	92	.....	..	....	1	4	..	..
430..	3	1	O	..	60	60	276	38	.....	38	.....	...	2	....	1	..	..
431..	.....	.....	O	..	60	60	100	90	.....	90	.....	...	....	....	1	..	..
432..	3	.....	O	I	60	N	8	.....	.....	N	.....	...	....	....	2	..	..
433..	1	.....	L	..	5	54	200	6	194	200	65	...	....	....	1	..	..
434..	2	.....	O	..	60	48	10	9	.....	9	.....	...	....	....	1	..	..
435..	1	1	O	..	60	60	31	9	22	31	7	...	....	....	1	..	..
436..	6	8	O	..	60	30	550	325	.....	325	.....	...	3	4	15	..	..
437..	1	.....	L	..	60	60	8	4	.....	4	.....	...	....	....	....	....	....
438..	1	.....	I	R	60	60	10	2	6	8	.....	...	....	....	....	....	....
439..	2	.....	O	..	60	60	160	115	.....	115	8	...	....	....	2	Y	Y
440..	2	.....	L	..	60	60	45	25	.....	25	.....	...	....	1	1	..	..
441..	.....	1	L	R	60	60	65	22	1	23	1	...	N	....	1	Y	Y
442..	4	1	O	..	60	60	25	25	.....	25	2	...	....	....	3	..	..
443..	P 1	.....	L	..	60	54	10	4	.....	4	.....	...	....	....	1	..	..
444..	.....	1	L	..	59	59	25	17	8	25	8	...	1	....	1	..	..
445..	.....	P 1	L	..	59	59	15	15	.....	15	N	...	1	....	1	Y	Y
446..	1	.....	O	..	60	60	8	5	.....	6	.....	...	....	1	1	..	..
447..	4	.....	O	..	60	48	35	20	.....	20	11	...	....	1	3	..	..
448..	.....	1	L	..	60	48	70	28	14	42	7	...	....	....	1	..	..
449..	2	.....	O	..	60	60	10	8	.....	8	2	...	....	1	1	N	N
450..	1	.....	O	..	60	60	7	4	.....	4	2	...	....	1	....	Y	Y

MILWAUKEE COUNTY,—Continued.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
401..	I	N	2	Y	A	Y	Y	Y	.....	G	50	....	3	1	75	....	....
402..	I	..	.....	.....	.....	.....	..	..	.....	G	52	N	2	1	200	....	....
403..	I	..	.....	.....	.....	.....	..	..	.....	G	.....	....	....	....	....	....	....
404..	O	..	3	Y	G	Y	..	..	Y	G	52	N	4	1	125	....	....
405..	O	..	.....	.....	.....	.....	..	..	.....	G	50	..	1	1	35	....	....
406..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	1	....	....	....	....
407..	I	..	1	Y	D	Y	Y	Y	.....	G	52	..	....	....	....	....	....
408..	I	..	.....	.....	.....	.....	..	..	Y	G	52	..	1	1	6	....	....
409..	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	....	25	....	....
410..	O	..	6	Y	G	Y	..	Y	Y	G	52	N	....	....	80	....	....
411..	O	..	9	..	D	..	..	..	.....	G	52	..	27	11	2720	....	....
412..	I	..	1	..	B	..	.....	..	Y	G	.....	....	....	....	....	....	....
413..	S	..	.....	.....	.....	.....	..	.....	.....	G	.....	..	1	1	40	....	....
414..	I	..	.....	.....	.....	.....	..	Y	.....	G	52	..	1	1	100	....	....
415..	I	..	.....	.....	.....	.....	..	..	Y	G	52	..	1	1	25	....	....
416..	I	..	1	Y	B	Y	..	..	..	G	52	..	....	....	....	....	....
417..	O	..	1	..	G	..	..	..	.....	G	52	....	2	1	60	....	....
418..	S	..	1	..	B	..	..	..	.....	G	50	N	1	1	75	....	....
419..	I	..	.....	.....	.....	.....	.....	..	Y	G	52	..	....	....	....	....	....
420..	I	..	.....	.....	.....	.....	Y	..	..	G	52	..	1	1	35	....	....
421..	I	..	.....	.....	.....	.....	..	..	..	G	10	..	1	1	25	....	....
422..	I	..	.....	.....	.....	.....	.....	..	..	G	52	..	....	1	6	....	....
423..	I	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....
424..	I	..	.....	.....	.....	.....	Y	..	.....	G	52	N	....	1	6	....	....
425..	I	..	.....	.....	.....	.....	..	..	.....	G	40	....	1	1	20	....	....
426..	I	..	1	Y	B	Y	..	..	Y	G	52	..	1	1	20	....	....
427..	O	..	7	..	G	..	..	..	..	F	52	1	6	3	....	....	555
428..	I	..	1	..	B	..	..	..	.....	F	52	N	3	2	90	....	....
429..	S	..	1	..	B	..	.....	.....	.....	F	52	..	5	2	175	....	....
430..	O	..	1	..	B	..	Y	Y	.....	G	52	....	....	10	....	....	160
431..	I	..	.....	.....	.....	.....	..	.....	.....	....	52	N	4	9	500	....	....
432..	I	..	.....	.....	.....	.....	..	.....	.....	G	.....	..	1	1	38	....	....
433..	O	..	1	Y	D	Y	..	Y	Y	G	48	..	1	1	35	....	....
434..	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	....	....	6	....	....
435..	I	..	1	..	D	Y	..	..	Y	G	52	..	1	1	10	....	....
436..	O	..	9	..	B	..	..	..	.....	F	52	..	9	8	390	....	....
437..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	1	2	....	....
438..	I	..	.....	.....	.....	.....	..	Y	Y	G	N	..	1	1	3	....	....
439..	S	..	1	Y	D	Y	..	..	.....	G	51	..	....	....	....	....	....
440..	O	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	40	....	....
441..	I	N	1	Y	D	Y	Y	N	N	G	52	N	....	....	40	....	....
442..	O	..	.....	.....	.....	.....	..	Y	.....	G	52	..	1	1	75	....	....
443..	I	..	1	Y	D	Y	..	..	.....	G	52	..	....	....	....	....	....
444..	I	..	.....	.....	.....	.....	..	..	N	G	52	....	....	1	....	....	3
445..	O	..	1	Y	D	..	..	..	.....	G	52	N	....	1	....	....	5
446..	O	..	.....	.....	.....	.....	.....	.....	.....	G	52	..	....	....	....	....	....
447..	S	..	.....	.....	.....	.....	Y	Y	.....	G	52	..	1	1	25	....	....
448..	I	..	1	Y	B	Y	..	..	N	G	52	..	....	1	....	....	12
449..	I	N	.....	.....	.....	.....	..	.....	.....	F	52	..	1	1	22	....	....
450..	I	..	.....	.....	.....	.....	.....	.....	.....	G	50	..	....	....	....	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
451..	1	.....	O	R	60	60	19	10	.....	10	.....	N	....	1	....	....	....
452..	.....	P 1	L	..	60	60	14	2	10	12	4	N	....	....	1	Y	Y
453..	.....	2	O	..	60	60	25	25	.....	25	N	...	2	....	1	..	..
454..	.....	1	O	..	54	64	150	8	93	101	12	...	1	1	1	..	..
455..	.....	P 1	L	..	48	48	125	85	40	125	26	...	2	....	2	..	..
456..	4	.....	O	..	60	60	100	90	.....	90	.....	...	....	....	2	..	..
457..	.....	1	O	..	57	57	25	18	7	25	2	...	1	....	1	..	..
458..	2	.....	O	I	60	N	5	.....	.....	.....	.....	...	....	....	....	....	....
459..	.....	P 1	L	R	60	64	60	15	15	30	14	...	2	....	1	Y	Y
460..	1	1	O	..	60	60	28	9	.....	9	.....	...	....	....	2	..	..
461..	.....	P 1	O	..	59	59	96	96	.....	96	.....	...	2	....	2	..	..
462..	1	3	O	..	60	48	450	130	.....	130	21	...	3	....	6	..	..
463..	1	P 1	L	..	48	48	35	9	.....	9	9	...	....	1	1	....	....
464..	.....	2	O	..	60	48	500	300	5	305	52	...	4	....	4	Y	Y
465..	2	.....	L	..	60	60	15	7	.....	7	.....	...	....	....	1	..	..
466..	3	.....	O	..	60	48	35	5	2	7	2	...	....	....	3	..	..
467..	1	.....	L	..	60	60	10	2	6	8	.....	...	....	....	1	..	..
468..	.....	1	O	..	60	60	125	90	10	100	11	...	2	....	1	..	..
469..	4	.....	O	..	60	60	96	95	.....	95	2	...	....	....	2	..	..
470..	P 1	.....	L	..	60	60	20	3	9	12	1	...	....	2	1	..	..
471..	1	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	1	..	..
472..	P 1	.....	L	..	60	60	8	2	3	5	2	...	....	....	....	....	....
473..	1	2	O	I	60	....	59	4	.....	4	.....	...	4	....	2	Y	Y
474..	P 1	.....	L	R	60	48	10	4	1	5	3	...	....	....	....	....	....
475..	1	.....	L	..	59	59	14	13	1	14	1	...	....	....	1	Y	Y
476..	P 1	.....	L	..	48	48	8	7	.....	7	.....	...	1	....	....	..	..
477..	1	.....	O	..	60	60	20	16	.....	16	1	...	....	....	1	..	..
478..	2	.....	O	..	60	60	22	15	.....	15	.....	...	....	....	1	..	..
479..	2	.....	O	..	60	30	6	1	.....	1	.....	...	....	....	1	..	..
480..	11	10	O	..	60	60	500	400	.....	400	.....	...	7	....	18	..	..
481..	3	.....	O	..	60	60	300	151	85	236	61	...	....	....	....	....	....
482..	1	.....	L	..	60	60	5	4	.....	4	1	...	....	....	2	Y	Y
483..	P 1	.....	L	..	60	60	15	5	.....	5	1	...	....	....	....	....	....
484..	2	.....	O	..	60	60	45	40	.....	40	.....	...	....	....	1	..	..
485..	1	1	O	..	54	54	12	7	.....	7	.....	...	....	....	1	Y	Y
486..	1	.....	O	..	60	60	8	3	.....	3	.....	...	....	1	1	..	..
487..	1	2	O	..	60	60	20	4	.....	4	2	...	....	1	1	..	..
488..	1	1	O	..	60	60	140	90	40	130	18	...	2	....	1	..	..
489..	P 1	.....	L	..	60	60	12	6	.....	6	.....	...	....	1	1	..	..
490..	3	.....	O	..	60	60	35	32	.....	32	.....	...	....	1	1	..	..
491..	1	3	L	..	60	48	180	95	.....	95	2	...	....	....	4	..	..
492..	.....	1	L	..	54	54	38	30	.....	30	6	...	....	....	1	..	..
493..	2	.....	O	..	60	36	5	2	.....	2	.....	...	....	....	1	..	..
494..	1	.....	O	..	48	48	35	11	12	23	6	...	....	....	2	..	..
495..	3	.....	L	..	60	60	20	15	.....	15	2	...	....	1	1	..	..
496..	.....	1	O	R	54	48	120	30	83	113	77	N	2	....	2	Y	Y
497..	.....	P 1	L	..	60	60	50	4	56	60	5	...	....	....	1	..	..
498..	.....	1	O	..	60	60	35	35	.....	35	.....	N	1	....	1	..	..
499..	2	P 2	L	..	60	54	45	14	.....	14	.....	...	2	1	3	..	..
500..	2	2	O	..	60	60	45	35	.....	35	.....	...	....	1	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
451..	I	N	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
452..	I	..	....	....	....	....	Y	Y	Y	G	52	..	1	1	10	....	....
453..	I	..	1	Y	B	Y	..	..	....	G	40	..	3	1	300	....	....
454..	O	..	1	..	B	..	N	..	Y	G	50	..	1	1	75	....	....
455..	I	..	1	..	G	..	Y	..	..	G	45	....	....	....	25	....	....
456..	I	..	1	..	B	..	..	..	....	F	52	N	1	1	30	....	....
457..	I	..	1	..	B	..	..	..	Y	F	46	..	....	....	....	....	....
458..	O	..	1	..	....	....	..	....	....	F	N	..	1	1	25	....	....
459..	O	..	1	..	D	Y	..	Y	Y	G	52	..	....	1	12	....	....
460..	I	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
461..	O	..	1	Y	A	Y	Y	..	....	G	52	..	2	1	135	....	....
462..	O	..	3	..	G	..	..	..	....	G	34	..	6	1	600	....	....
463..	....	....	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
464..	I	N	2	Y	G	Y	Y	Y	Y	G	52	..	2	1	30	....	....
465..	I	..	....	....	....	....	..	....	....	G	52	..	....	1	4	....	....
466..	I	..	1	..	D	Y	..	Y	Y	F	52	..	2	1	70	....	....
467..	I	.	....	....	....	....	..	..	..	G	52	..	1	1	24	....	....
468..	I	..	1	Y	B	Y	..	..	..	G	48	..	1	1	75	....	....
469..	S	..	1	..	B	..	..	..	....	F	48	..	1	1	50	....	....
470..	I	..	....	....	....	....	..	..	Y	G	52	..	1	1	20	....	....
471..	I	..	1	Y	B	Y	..	..	....	G	52	..	1	1	25	....	....
472..	I	..	....	....	....	....	....	N	....	G	52	..	....	....	....	....	....
473..	I	..	1	Y	....	....	..	..	Y	G	....	....	4	2	750	....	....
474..	I	..	....	....	D	Y	..	..	..	G	52	N	1	1	15	....	....
475..	I	..	1	Y	G	Y	Y	Y	....	G	52	..	....	1	7	....	....
476..	O	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
477..	I	..	1	Y	D	Y	....	..	....	G	....	....	....	....	....	....	....
478..	I	..	....	....	....	....	....	..	....	G	52	N	....	....	....	....	....
479..	I	..	....	....	....	....	Y	....	....	G	16	....	....	....	....	....	....
480..	O	..	4	..	A	Y	..	Y	....	G	52	N	15	6	1000	....	....
481..	O	..	....	....	....	....	..	..	Y	G	52	..	2	1	48	....	....
482..	I	..	1	Y	B	Y	....	..	....	G	52	..	....	....	....	....	....
483..	I	..	....	....	....	....	Y	..	....	G	26	..	1	1	20	....	....
484..	I	..	....	....	....	....	..	....	....	G	47	..	2	1	80	....	....
485..	I	..	....	....	....	....	....	Y	....	G	52	..	....	....	....	....	....
486..	I	..	....	....	....	....	Y	..	....	G	52	..	....	1	7	....	....
487..	I	..	....	....	....	....	....	..	....	F	26	..	1	1	20	....	....
488..	O	..	2	Y	D	Y	Y	..	Y	G	45	..	2	1	50	....	....
489..	I	..	....	....	....	....	..	..	....	G	52	..	1	1	15	....	....
490..	O	..	....	....	....	....	..	....	....	G	52	..	3	1	300	....	....
491..	S	..	2	Y	D	Y	..	Y	....	G	51	..	1	1	35	....	....
492..	I	..	....	....	....	....	..	..	....	G	52	..	....	1	3	....	....
493..	I	..	....	....	....	....	..	....	....	G	12	....	....	1	3	....	....
494..	I	..	1	Y	D	Y	..	Y	Y	G	52	N	1	1	30	....	....
495..	O	..	....	....	....	....	..	....	....	G	52	..	1	1	80	....	....
496..	O	N	2	Y	D	Y	Y	Y	Y	G	52	N	2	1	75	....	....
497..	I	..	2	..	B	..	....	..	..	G	8	..	....	....	....	....	....
498..	O	..	1	..	D	..	Y	..	....	G	52	....	1	1	20	....	....
499..	I	N	....	....	....	....	..	..	....	G	N	N	1	1	65	....	....
500..	S	..	....	....	....	....	..	....	....	F	52	..	3	2	63	....	....

MILWAUKEE,

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
501..	.....	1	L	R	48	48	20	20	.....	20	.....	...	1	....	1	Y	Y
502..	P 2	.....	O	..	60	60	50	50	.....	50	.....	...	....	....	2	..	..
503..	1	.....	O	..	60	60	5	4	1	5	1	...	....	1	2	..	..
504..	.....	P 1	L	..	59	59	47	30	17	47	10	...	2	....	1	..	..
505..	.....	1	O	..	60	60	70	68	2	70	.....	...	1	....	1	..	..
506..	.....	1	O	..	60	60	36	36	.....	36	.....	...	....	1	1	..	..
507..	.....	1	L	..	59	36	12	12	.....	12	.....	...	....	....	1	..	..
508..	3	.....	O	..	60	60	45	25	.....	25	.....	...	....	....	2	..	..
509..	P 2	.....	O	..	60	60	32	18	.....	18	.....	...	....	....	1	..	..
510..	3	.....	O	..	60	60	45	22	.....	22	.....	...	....	....	1	..	..
511..	.....	1	L	..	60	60	125	10	15	25	.....	...	1	....	1	..	..
512..	.....	1	L	..	60	60	16	16	.....	16	.....	...	....	....	1	..	..
513..	P 1	.....	L	..	60	60	35	13	.....	13	.....	...	....	1	1	..	..
514..	1	.....	O	..	60	60	9	6	.....	6	.....	...	....	....	1	..	..
515..	2	.....	O	..	60	60	8	8	.....	8	.....	...	2	....	6	..	..
516..	.....	1	L	..	60	60	65	55	10	65	2	N	1	....	1	..	..
517..	P 2	1	L	..	60	60	80	30	1	31	.....	...	2	....	3	..	..
518..	3	4	O	..	60	60	350	250	.....	250	45	...	4	....	4	..	..
519..	.....	P 1	L	..	60	60	18	16	.....	16	1	...	1	....	1	..	..
520..	.....	P 1	L	..	60	60	17	14	.....	14	.....	...	....	....	1	..	..
521..	.....	1	L	..	60	60	17	12	.....	12	1	...	....	....	1	..	..
522..	1	.....	L	..	60	50	48	24	.....	24	1	N	....	....	....	....	....
523..	.....	1	L	..	60	30	15	12	3	15	4	..	....	....	1	Y	Y
524..	2	.....	O	..	60	60	63	63	.....	63	2	...	....	....	1	..	..
525..	1	.....	L	..	60	60	8	5	.....	5	.....	...	....	....	1	..	..
526..	.....	P 1	L	..	60	48	14	5	4	9	3	..	1	1	1	..	..
527..	2	.....	L	..	60	60	16	2	8	10	4	...	....	....	1	..	..
528..	3	.....	O	I	60	N	12	1	.....	1	.....	...	....	....	2	..	..
529..	2	.....	O	R	60	60	10	5	.....	5	.....	...	....	....	....	....	....
530..	.....	P 1	L	..	59	59	23	10	3	13	.....	...	....	1	....	Y	Y
531..	3	1	O	..	60	60	20	20	.....	20	.....	...	....	2	1	..	..
532..	1	.....	O	..	48	48	12	7	.....	7	2	...	....	....	1	..	..
533..	P 1	.....	O	..	54	54	25	10	.....	10	.....	...	....	1	....	..	..
534..	2	.....	O	..	60	60	35	17	.....	17	.....	...	....	....	2	..	..
535..	2	1	O	..	60	48	65	60	.....	60	.....	...	....	....	1	..	..
536..	1	.....	L	..	60	60	10	5	.....	5	.....	...	....	....	1	....	....
537..	.....	P 1	L	..	60	60	20	12	.....	12	2	...	....	....	1	Y	Y
538..	3	.....	O	..	60	60	16	9	.....	9	.....	...	....	....	1	..	..
539..	5	.....	O	..	60	60	100	75	.....	75	6	...	....	2	1	..	..
540..	.....	P 2	L	..	60	60	50	15	15	30	N	...	2	....	2	..	..
541..	1	.....	O	..	60	48	15	10	.....	10	.....	...	....	....	....	....	....
542..	4	2	O	..	60	30	75	30	.....	30	.....	...	....	....	3	Y	Y
543..	.....	P 1	O	..	60	48	31	2	.....	2	.....	...	....	....	1	..	..
544..	.....	P 1	L	..	59	59	10	8	.....	8	.....	...	....	1	....	..	..
545..	.....	1	L	..	60	48	40	20	.....	20	3	...	1	....	1	..	..
546..	P 1	.....	L	..	60	60	25	3	17	20	6	...	....	1	1	..	..
547..	.....	P 1	O	..	60	60	40	30	10	40	19	...	....	1	1	..	..
548..	.....	1	L	..	60	60	23	12	.....	12	.....	...	1	....	1	..	..
549..	3	.....	O	..	60	54	80	40	.....	40	.....	...	....	....	1	..	..
550..	P 1	.....	O	..	60	60	7	7	.....	7	.....	...	....	1	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number	DOORS.		ELEVATORS				Machinery vats and pan guarded.	CLOSETS.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	HORSE-POWER.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
501..	I	N	....	....	....	....	..	Y	....	G	52	N	1	1	12	....	....
502..	O	..	1	Y	D	Y	..	..	....	G	50	..	....	1	14	....	....
503..	S	..	....	....	....	....	..	..	Y	F	52	..	1	1	5	....	....
504..	I	..	1	Y	A	..	..	..	..	G	52	..	....	....	....	....	2½
505..	I	..	3	..	G	Y	..	..	..	G	52	..	2	2	110	....	10
506..	I	..	1	..	B	..	....	..	....	G	52	..	....	....	....	....	....
507..	I	..	1	..	D	..	Y	..	....	G	52	..	....	....	....	....	....
508..	S	..	1	..	B	..	N	..	....	G	44	..	1	1	60	....	....
509..	O	..	....	....	....	....	Y	..	....	G	52	..	1	1	8	....	....
510..	S	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
511..	I	..	1	Y	D	Y	..	Y	Y	G	52	N	....	1	....	....	8
512..	O	..	2	..	D	..	..	..	....	G	52	..	1	1	8	....	....
513..	I	..	....	....				..	....	G	52	....	1	1	25	....	....
514..	O	..	....	....	....	....	....	....	....	G	52	N	1	1	8	....	....
515..	I	..	....	....	....	....	Y	Y	....	G	52	..	3	2	450	....	....
516..	I	..	1	Y	A	Y	..	..	Y	G	52	..	....	....	....	....	....
517..	O	..	1	..	D	..	..	..	....	G	52	..	2	1	75	....	....
518..	O	..	2	..	G	..	..	..	....	G	52	..	4	1	250	....	....
519..	I	..	1	..	G	..	..	..	....	G	52	..	....	1	9	....	....
520..	I	..	1	..	D	..	..	..	....	G	....	..	....	1	....	....	10
521..	I	..	1	..	....	....	..	....	....	F	52	..	1	1	10	....	....
522..	O	..	....	....	D	..	..	..	....	F	52	..	1	1	35	....	....
523..	I	..	1	Y	S	Y	..	Y	Y	G	52	..	....	1	9	....	....
524..	I	..	....	....	....	....	..	....	....	....	9	..	2	1	80	....	....
525..	I	..	1	Y	B	Y	..	N	....	G	52	..	1	1	18	....	....
526..	O	..	1	..	A	..	..	Y	Y	G	50	..	....	....	....	....	....
527..	I	..	....	....	....	....	..	..	..	G	52	..	1	1	12	....	....
528..	S	..	1	..	B	Y	..	....	....	F	40	..	1	1	20	....	....
529..	I	..	....	....	....	....	..	....	....	F	52	..	2	1	30	....	....
530..	I	..	....	....	....	....	..	Y	Y	G	52	..	....	....	....	....	5
531..	I	..	1	Y	B	Y	..	..	....	F	44	..	1	1	18	....	....
532..	I	..	....	....	....	....	....	..	....	G	50	..	....	....	....	....	....
533..	I	..	....	....	....	....	Y	N	....	G	52	1	....	....	....	....	....
534..	I	..	1	Y	B	Y	..	Y	....	G	52	N	1	1	30	....	....
535..	S	..	....	....	....	....	.	..	....	G	36½	..	1	1	40	....	....
536..	....	....	....	....	....	....	....	....	....	G	....	..	....	....	....	....	....
537..	I	N	1	Y	D	Y	Y	Y	....	G	52	..	....	1	....	....	6
538..	S	..	1	..	B	..	..	....	....	G	52	..	1	1	70	....	....
539..	I	..	1	..	B	..	..	....	....	G	48	..	2	1	125	....	....
540..	I	..	1	..	D	..	..	Y	Y	G	52	..	....	1	12	....	....
541..	....	....	....	....	....	....	..	....	....	....	52	..	1	1	6	....	....
542..	O	N	1	Y	D	Y	..	Y	....	F	52	..	2	1	100	....	....
543..	O	..	1	..	D	..	....	....	....	G	26	..	....	....	....	....	....
544..	I	..	....	....	....	....	Y	Y	....	G	52	..	....	1	....	....	2
545..	I	..	1	Y	S	Y	..	..	....	G	50	..	....	1	....	....	....
546..	O	..	1	..	S	..	..	..	Y	G	50	..	1	1	50	....	....
547..	I	..	1	..	B	..	....	..	..	G	52	..	....	....	....	....	....
548..	I	..	1	..	S	..	Y	..	....	G	52	..	1	1	10	....	....
549..	S	..	....	....	....	....	..	..	....	G	50	..	1	1	30	....	....
550..	O	..	1	Y	B	Y	..	....	....	F	42	..	1	1	10	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside	Openings guarded.	Have hand rails
551..	4	2	O	R	60	60	300	220	.....	220	7	...	2	....	3	Y	Y
552..	3	2	O	..	60	60	125	110	.....	110	4	...	1	2	3	..	..
553..	1	.....	O	..	60	60	8	4	.....	4	.....	...	....	....	1	..	..
554..	2	1	O	..	60	60	18	18	.....	18	.....	...	....	....	2	..	..
555..	6	1	O	..	60	60	115	115	.....	115	.....	..			3	..	..
556..	.....	P 1	L	..	60	60	7	7	.....	7	.....	N	1	....	1	..	..
557..	.....	.....	L	..	60	60	15	16	.....	16	2	...	....	....	....	....	....
558..	1	.....	O	..	60	60	15	15	.....	15	.....	...	....	....	1	Y	Y
559..	.....	P 1	L	..	60	48	25	5	.....	5	2	...	....	....	2	..	..
560..	.....	2	O	..	60	60	400	18	382	400	104	N	1	....	2	..	..
561..	1	.....	O	I	60	.....	6	.....	.....	.....	.....	...	....	....	....	....	....
562..	.....	P 1	L	R	60	60	65	34	26	60	3	...	1	....	1	Y	Y
563.	1	.....	L	..	60	60	5	3	.....	3	1	...	....	....	1	..	..
564..	5	1	O	..	59	59	145	145	.....	145	.....	...	....	....	2	..	..
565..	3	1	O	..	60	60	70	26	.....	26	.....	...	....	1	2	..	..
566..	P 2	.....	L	..	60	60	5	2	.....	2	1	...	....	....	1	..	..
567..	1	P 1	L	..	54	54	20	20	.....	20	.....	...	....	....	2	..	..
568..	2	.....	O	..	60	48	45	10	.....	10	.....	...	....	....	1	..	..
569..	1	.....	O	..	60	60	8	4	.....	4	.....	...	....	1	2	..	..
570..	.....	P 1	L	..	60	60	15	9	6	15	7	...	1	....	1	..	..
571..	1	1	O	..	60	60	150	110	15	125	79	...	1	....	1	..	..
572..	1	.....	L	..	60	60	5	1	.....	1	.....	...	....	....	....	....	....
573..	1	.....	O	..	60	60	6	3	.....	3	1	...	....	....	1	Y	Y
574..	P 2	.....	L	..	60	60	9	4	5	9	.....	...	....	....	....	....	....
575..	1	1	O	..	60	60	65	50	.....	50	4	...	1	....	2	Y	Y
576..	.....	P 1	L	..	60	54	18	11	.....	11	8	...	2	....	1	..	..
577..	.....	P 1	L	..	60	54	14	7	.....	7	3	...	1	....	1	..	..
578..	1	.....	O	..	60	30	10	2	.....	2	1	...	....	....	1	..	..
579..	1	.....	O	..	60	60	16	7	.....	7	.....	...	....	....	....	....	....
580..	1	.....	O	..	60	60	10	8	.....	8	.....	...	....	....	....	....	....
581..	1	1	O	..	60	60	20	10	.....	10	3	...	....	....	2	Y	Y
582..	.....	1	O	..	48	48	35	15	5	20	6	...	1	....	1	..	..
583..	P 1	.....	L	..	60	60	9	3	4	7	.....	...	....	2	1	..	..
584..	1	.....	O	..	60	60	15	7	.....	7	2	...	....	....	1	..	..
585..	1	.....	L	..	60	60	20	16	.....	15	1	...	....	....	1	..	..
586..	6	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	2	..	..
587..	.....	1	L	..	60	54	20	13	7	20	1	...	1	....	1	..	..
588..	1	.....	O	..	60	60	12	12	.....	12	.....	...	....	....	....	....	....
589..	.....	P 1	L	..	60	60	10	5	.....	6	.....	...	1	....	1	..	..
590..	.....	1	L	..	60	60	75	73	2	75	14	...	....	....	1	..	..
591..	.....	1	O	..	57	57	300	25	250	275	90	1	....	....	2	..	..
592..	.....	1	L	..	60	60	30	10	20	30	24	...	1	....	1	..	..
593..	.....	P 1	L	..	59	59	13	10	.....	10	.....	...	1	....	1	..	..
594..	2	.....	O	..	60	60	25	22	.....	22	.....	...	....	1	1	..	..
595..	.....	P 1	L	..	54	54	30	16	.....	16	4	...	....	....	1	..	..
596..	2	.....	O	..	60	60	18	10	.....	10	.....	...	....	....	....	....	....
597..	2	.....	O	..	60	48	8	2	.....	2	.....	...	....	....	....	....	....
598..	2	1	O	..	60	48	125	75	.....	75	4	...	1	....	4	Y	Y
599..	.....	1	L	..	53	53	40	40	.....	40	13	...	1	....	1	..	..
600..	2	.....	O	..	60	48	8	3	.....	3	.....	...	....	....	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
551..	O	N	2	Y	B	Y	Y	Y	.....	G	48	N	3	1	125	....	....
552..	O	..	1	..	B	..	..	..	.....	G	48	..	3	1	340	....	....
553..	I	..	.....	.....	....	.....	.....	.....	.....	G	50	..	....	....	....	....	....
554..	I	..	.....	.....	....	.....	Y	Y	.....	G	50	..	2	2	205	....	....
555..	I	..	11	.....	....	.....	..	.....	.....	...	52	..	5	3	350	....	....
556..	I	..	1	Y	G	Y	..	Y	.....	G	10	..	....	....	2	....	....
557..	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	45	....	....	....	....	....	....
558..	O	N	1	Y	B	Y	Y	Y	.....	G	52	..	1	1	15	....	....
559..	I	..	1	..	B	..	..	..	.....	G	52	....	....	....	....	....	6
560..	O	..	1	..	B	..	..	..	Y	G	52	..	2	1	55	....	....
561..	I	..	.....	.....	....	.....	.....	.....	.....	G	.....	....	....	....	....	....	....
562..	O	..	1	Y	D	Y	Y	Y	Y	G	52	N	....	1	6	....	....
563..	I	..	.....	.....	....	.....	.....	..	.....	G	26	....	....	....	....	....	....
564..	S	..	.....	.....	....	.....	Y	Y	.....	G	52	N	2	1	116	....	....
565..	O	..	.....	.....	....	.....	..	.....	.....	G	52	..	1	1	85	....	....
566..	I	..	.....	.....	....	.....	.....	.....	.....	G	50	....	....	....	....	....	....
567..	O	..	2	Y	D	Y	Y	Y	.....	F	52	N	1	1	30	....	....
568..	I	..	.....	.....	....	.....	..	.....	.....	G	52	..	1	1	8	....	....
569..	I	..	.....	.....	....	.....	.....	Y	.....	G	52	..	....	....	....	....	....
570..	I	..	1	Y	D	Y	Y	..	N	G	35	..	....	....	....	....	....
571..	I	..	1	..	D	..	..	..	Y	G	52	..	2	1	85	....	....
572..	I	..	.....	.....	....	.....	.....	.....	.....	G	26	....	....	....	....	....	....
573..	I	..	.....	.....	....	.....	Y	.....	.....	G	52	N	1	1	4	....	....
574..	I	..	.....	.....	....	.....	..	Y	Y	G	4	..	1	1	25	....	....
575..	O	..	1	Y	D	Y	..	..	.....	G	52	....	....	....	....	....	....
576..	I	..	1	..	D	..	..	..	Y	G	52	..	....	1	....	....	1
577..	O	..	1	..	D	..	..	..	..	G	.....	....	....	....	....	....	....
578..	I	..	.....	.....	....	.....	.....	.....	.....	G	44	....	....	....	....	....	....
579..	I	..	.....	.....	....	.....	Y	.....	.....	G	52	N	1	1	6	....	....
580..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
581..	I	..	1	Y	B	Y	Y	Y	.....	G	52	N	1	1	25	....	....
582..	O	N	1	..	D	..	..	..	Y	G	52	..	....	2	....	....	12
583..	I	..	.....	.....	....	.....	..	..	..	G	52	..	1	1	20	....	....
584..	I	..	.....	.....	....	.....	..	..	.....	G	52	..	1	1	8	....	....
585..	I	..	1	Y	B	Y	..	..	.....	G	52	..	....	1	10	....	....
586..	I	..	.....	.....	....	.....	..	..	.....	G	52	..	1	1	4	....	....
587..	I	..	1	Y	A	Y	..	..	Y	G	52	..	....	1	....	....	3
588..	.....	.....	.....	.....	....	.....	..	.....	.....	.....	52	....	1	1	30	....	....
589..	O	N	1	Y	G	Y	..	Y	.....	G	28	..	....	....	8	....	....
590..	O	..	2	..	B	..	..	..	Y	G	22	..	1	1	25	....	....
591..	O	..	1	..	D	..	..	..	..	G	51	..	2	2	56	....	....
592..	I	..	1	..	T	..	..	..	..	G	52	..	....	1	10	....	....
593..	I	..	.....	.....	....	.....	..	..	.....	G	52	..	....	1	8	....	....
594..	S	..	.....	.....	....	.....	..	..	.....	G	45	..	1	1	35	....	....
595..	I	..	1	Y	D	Y	..	Y	.....	G	52	..	....	1	4	....	....
596..	S	..	.....	.....	....	.....	.....	.....	.....	G	45	....	....	....	....	....	....
597..	I	..	.....	.....	....	.....	Y	.....	.....	G	16	N	1	1	40	....	....
598..	S	..	2	Y	B	Y	..	Y	.....	G	52	....	2	1	125	....	....
599..	O	..	1	..	A	..	..	..	.....	G	52	N	1	1	25	....	....
600..	I	..	.....	.....	....	.....	N	.....	.....	G	N	..	1	1	60	....	....

MILWAUKEE,

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection. Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
601..	7	.....	O	R	60	60	180	100	.....	100	.....	...	....	....	....	....	....
602..	3	.....	O	..	60	60	36	30	.....	30	6	...	....	....	2	Y	Y
603..	P 1	P 1	L	..	59	48	50	20	.....	20	2	...	1	....	2	..	..
604..	9	.....	O	..	60	60	475	304	.....	304	45	...	....	....	1	..	..
605..	2	1	L	..	60	60	20	20	.....	20	.....	...	4	....	2	..	..
606..	1	.....	O	I	60	....	8	.....	.....	.....	.....	...	....	....	....	....	....
607..	3	2	O	R	60	60	150	85	.....	85	12	...	1	1	2	Y	Y
608..	1	.....	O	..	60	60	9	2	7	9	.....	...	....	....	....	....	....
609..	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	1	1	Y	Y
610..	1	.....	O	..	60	60	32	20	12	32	4	...	....	1	1	..	..
611..	.....	P 1	L	..	60	60	6	4	2	6	.....	...	1	....	1	..	..
612..	.....	P 1	L	..	59	59	125	125	.....	125	12	...	1	....	1	..	..
613..	5	3	O	..	60	60	68	68	.....	68	.....	...	....	....	6	..	..
614..	.....	2	L	..	60	60	6	6	.....	6	.....	...	....	....	2	..	..
615..	1	.....	O	..	60	48	15	5	.....	5	.....	...	....	....	....	....	....
616..	.....	2	O	..	59	59	138	63	76	139	79	...	3	....	3	Y	Y
617..	1	.....	O	..	50	50	13	4	9	13	.....	...	....	2	1	..	..
618..	4	4	O	..	60	60	[illegible]	375	.....	375	12	...	2	....	3	..	..
619..	4	.....	O	..	60	60	26	26	.....	26	2	...	....	1	2	..	..
621..	....	P 1	L	R	60	60	100	35	.....	35	2	...	2	....	1	Y	Y
622..	.....	P 1	L	..	60	60	12	12	.....	12	.....	...	2	....	1	..	..
623..	.....	P 1	L	..	60	60	15	8	.....	8	.....	...	1	....	1	..	..
624..	P 1	.....	O	..	60	60	20	8	12	20	8	...	....	....	....	....	....
625..	.....	P 1	L	..	48	48	10	6	.....	5	.....	...	1	....	1	Y	Y
626..	1	.....	L	..	60	60	29	11	.....	11	2	...	....	....	1	..	..
627..	2	.. ..	L	.	60	60	10	6	.....	6	2	...	....	....	....	....	....
628..	1	.....	L	..	60	48	20	5	.....	5	.....	...	....	....	....	....	....
629..	1	.....	L	..	60	60	120	13	25	38	24	...	....	1	1	Y	Y
630..	.....	P 1	L	..	60	60	12	4	6	10	4	...	....	1	1	Y	Y
631..	.....	P 1	L	..	60	60	10	5	.....	5	1	...	....	....	1	..	..
632..	.....	P 1	L	..	60	60	8	5	1	6	1	...	....	....	1	..	..
633..	.....	1	L	..	60	60	15	9	.....	9	1	...	....	1	1	..	..
634..	.....	P 1	L	..	60	60	30	19	.....	19	3	...	2	1	1	..	..
635..	P 1	P 1	L	..	60	60	15	15	.....	15	3	...	1	....	1	..	..
636..	4	.....	O	..	48	48	6	6	.....	6	1	...	....	2	1	..	..
637..	.....	P 1	L	..	60	60	15	10	.....	10	2	...	....	....	1	..	..

MILWAUKEE COUNTY,—Continued.

Running number.	Doors.		Elevators				Machinery vats and pans guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
601..	I	N	....	....	....	....	Y	Y	....	G	52	1	2	1	150	....	....
602..	S	..	1	Y	R	Y	..	..	....	G	50	1	1	1	60	....	....
603..	I	..	1	..	G	..	..	..	....	G	52	N	2	1	60	....	....
604..	I	..	....	....	....	....	..	....	....	F	50	..	2	1	120	....	....
605..	I	..	1	Y	B	Y	..	Y	....	G	52	..	2	1	200	....	....
606..	I	N	....	....	....	....	Y	....	....	F	....	....	....	....	....	....	....
607..	S	..	1	Y	B	Y	..	Y	....	G	51	N	2	1	160	....	....
608..	I	..	....	....	....	....	..	..	Y	G	52	..	1	1	15	....	....
609..	O	..	....	....	....	....	....	....	....	G	52	..	....	....	....	....	....
610..	I	..	....	....	....	....	Y	Y	Y	F	50	..	1	1	10	....	....
611..	I	..	2	Y	D	Y	..	..	..	G	52	..	....	....	....	....	....
612..	O	..	1	..	A	..	..	..	....	G	52	..	1	1	20	....	....
613..	I	..	1	..	T	..	..	..	....	G	52	..	3	6	205	....	....
614..	I	..	....	....	....	....	..	..	....	G	52	..	1	1	20	....	....
615..	I	..	....	....	....	....	..	..	....	G	52	..	....	2	20	....	....
616..	I	..	2	Y	B	Y	..	..	Y	F	52	..	3	1	100	....	....
617..	I	..	....	....	....	....	..	..	..	G	52	..	1	1	10	....	....
618..	O	..	3	..	D	Y	..	..	....	G	52	..	4	1	200	....	....
619..	I	..	1	..	B	..	..	..	....	G	50	..	1	1	25	....	....
621..	I	N	1	Y	D	Y	Y	Y	Y	G	0	....	1		25	....	..
622..	I	..	2	..	D	..	..	..	..	G	....	....	....	....	....	....	....
623..	I	..	2	..	D	..	..	..	..	G	....	....	....	1	....	....	7½
624..	I	..	....	....	....	....	....	..	..	G	....	....	....	....	H	....	....
625..	I	..	2	Y	D	Y	Y	..	..	G	....	....	....	....	....	....	4
626..	I	..	....	....	....	....	....	..	....	G	52	....	....	....	H	....	....
627..	I	..	....	....	....	....	Y	..	....	F	....	....	....	1	10	....	....
628..	I	..	....	....	....	....	..	....	....	F	....	....	1	1	35	....	....
629..	I	..	....	....	....	....	....	Y	....	G	....	....	....	....	H	....	....
630..	I	..	1	Y	D	Y	Y	..	Y	F	....	....	....	1	....	....	....
631..	I	..	1	..	D	..	..	..	..	F	....	....	....	....	6	....	....
632..	I	..	3	Y	D	..	..	..	..	G	10	....	....	....	....	....	4
633..	I	..	....	....	....	....	....	..	....	G	....	....	....	....	H	....	....
634..	I	..	1	Y	D	Y	Y	..	Y	F	....	....	1	2	50	....	....
635..	I	..	1	..	D	..	..	..	..	G	....	....	....	....	15	....	....
636..	I	..	....	....	....	....	..	....	....	F	....	....	1	1	25	....	....
637..	O	..	3	Y	D	Y	..	Y	Y	F	....	....	....	....	....	....	2

ALBANY.

	Buildings.		Plant.		Hours per Week.		Employees							Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
638..	5	.....	O	R	60	60	76	14	13	27	.....	...	....		1	Y	Y
639..	2	.....	O	..	60	60	5	4	.....	4	.....	...	....	....	1	..	..
640..	2	.....	O	..	60	60	2	2	.....	2	.....	...	....	....	1	..	..
641..	1	.....	O	..	60	60	5	2	.....	2	.....	...	....	1	....	..	..

AHNAPEE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
642..	5	1	O	R	60	60	45	20	.....	20	2	...	....	....	2	Y	Y
643.. P	1	.....	L	..	60	60	5	4	1	5	.....	...	....	....	1	..	..
644..	2	1	O	..	60	60	55	36	4	40	6	...	....	....	2	..	..
645..	3	.....	O	..	60	60	22	18	.....	18	3	...	....	....	1	..	..
646..	2	.....	O	..	60	60	16	5	.....	5	2	...	....	....	1	..	..
647..	5	.....	O	..	60	60	15	9	.....	9	.....	...	....	....	....	....	....

ALMA.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
648..	3	.....	O	R	60	60	5	5	.....	5	.....	...	....	1	1	Y	Y
649..	.....	1	O	..	72	72	6	6	.....	6	.....	...	....	....	2	..	..
650..	1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	1	..	..
651..		.....	L	..	60	60	7	7	.....	7	.....	...	....	....	....	....	....

AMBERG.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
652..	1	.....	O	R	60	60	100	20	.....	20	.....	...	....	....	....	....	....
653..	.....	.....	O	I	60	60	20	14	.....	14	.....	1	....	....	....	....	....
654..	1	.....	O	R	48	48	12	12	.....	12	.....	...	....	....	....	....	....

AMERY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
655..	2	1	O	R	60	60	5	4	.....	4	.....	...	....	1	2	Y	Y
656..	1	.....	O	I	60	60	2	2	.....	2	.....	...	....	....	....	....	....
657..	11	.....	O	I	60	....	125	20	.....	20	2	...	....	2	2	....	Y
658..	1	.....	O	R	48	48	2	2	.....	2	.....	...	....	....	....	....	....

ANIWA.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
659..	2	.....	O	I	60	....	22	.....	.....	.....	.....	...	....	....	1	....	....

ANTIGO.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
660..	2	.....	O	R	60	60	.....	4	.....	4	.....	...	....	....	1	....	....
661..	2	.....	O	R	66	66	4	4	.....	4	.....	...	....	....	....	Y	Y
662..	5	.....	O	..	60	60	45	45	.....	45	4	..	....	1	1	....	....
663..	2	.....	O	..	60	60	50	50	.....	50	4	..	....	....	....	....	....
664..	3	.....	O	..	60	60	15	5	.....	5	.....	..	....	....	....	....	....
665..	2	1	O	R	66	66	9	9	.....	9	.....	...	....	....	1	Y	Y
666..	2	.....	O	..	60	60	50	50	.....	50	.....	..	....	3	....	..	..
667..	7	.....	O	..	60	60	50	46	.....	46	4	..	....	....	3	....	..
668..	2	.....	O	..	60	60	10	2	2	4	.....	..	....	....	1	..	..
669..	4	1	O	..	60	60	47	45	2	47	5	..	....	1	2	....	....

GREEN COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
638..	I	N	1	Y	D	Y	Y	Y	Y	G	N	....	1	1	30	150	....
639..	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	200	....	....
640..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	1	1	10	....	....
641..	I	..	.....	.....	....	.....	Y	.....	.....	G	N	....	....	....	....	20	....

KEWAUNEE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
642..	I	..	2	Y	B	Y	Y	Y	.....	G	35	....	1	1	75	....	....
643..	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
644..	O	..	1	Y	B	Y	Y	..	.....	G	52	....	1	1	100	....	....
645..	O	..	.....	.....	....	.....	..	.....	.....	G	52	2	1	1	60	....	....
646..	I	..	.....	.....	....	.....	.....	.....	.....	F	52	....	1	1	15	....	....
647..	I	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	2	118	....	....

BUFFALO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
648..	I	..	.....	.....	....	.....	Y	Y	.....	G	52	....	1	1	25	....	....
649..	I	..	.....	.....	....	.....	..	..	.....	G	46	....	2	1	160	....	....
650..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	....	....	....	....	....
651..	.....	..	.....	.....	....	.....	..	..	.....	G	52	....	....	1	....	....	G

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
652..	I	..	.....	.....	....	.....	.....	.....	.....	....	.....	....	1	4	....	....	....
653..	.....	.....	.....	.....	....	.....	Y	.....	.....	....	N	....	1	1	....	....	....
654..	.....	.....	.....	.....	....	.....	.....	.....	.....	....	.....	....	....	....	....	....	....

POLK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
655.	S	..	.....	.....	....	.....	Y	Y	.....	....	52	....	....	....	....	80	....
656..	I	..	.....	.....	....	.....	..	..	.....	....	52	....	....	....	....	....	....
657..	.....	..	.....	.....	....	.....	..	..	.....	....	50	....	5	2	295	....	....
658..	I	..	.....	.....	....	.....	Y	..	.....	G	52	....	....	....	....	....	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
659..	I	N	.....	.....	....	.....	..	.....	.....	G	26	....	1	1	45	....	....

LANGLADE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
660..	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	25	....	....
661..	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	2	2	220	....	....
662..	S	..	.....	.....	....	.....	..	Y	.....	G	35	....	1	1	180	....	....
663..	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	85	....	....
664..	I	..	.....	.....	....	.....	..	.....	.....	G	.....	....	1	1	35	....	....
665..	I	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	1	75	....	....
666..	S	..	.....	.....	....	.....	Y	.....	.....	G	26	....	2	1	150	....	....
667..	S	..	1	Y	A	Y	..	Y	.....	G	52	....	2	1	125	....	....
668..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	7	....	....
669..	S	..	1	Y	B	Y	..	..	.....	G	40	....	2	1	150	....	....

ANTIGO—Continued.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
670..	1	.....	O	R	60	60	22	22	.....	22	.....	...	...	....	....	....	....
671..	1	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	1	Y	Y
672..	5	1	O	..	60	60	35	35	.....	35	10	...	....	....	1	..	..
673..	4	.....	O	..	60	60	7	6	.....	5	.....	...	....	....	1	..	..
674..	3	.....	O	..	60	60	35	35	.....	35	.....	...	....	....	1	..	..
675..	1	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	....	....	....
676..	P 1	.....	O	..	60	60	2	2	.....	2	1	...	....	....	....	....	....
677..	2	.....	O	..	60	60	20	18	.....	18	.....	...	....	....	....	....	....

ARBOR VITAE.

678..	4	.....	O	..	120	60	250	188	.....	188	4	....	....	....	2	Y	Y

ARCADIA.

679..	.....	.....	O	..	72	72	2	2	.....	2	.....	...	....	....	....	....	....
680..	1	.....	L	..	60	60	2	1	.....	1	.....	...	....	....	....	....	....
681..	2	1	O	..	60	60	7	7	.....	7	1	...	....	1	2	Y	Y
682..	1	.....	O	..	60	60	2	2	.....	2	.....	...	....	....	....	....	....

ASHLAND.

683..	1	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	....	....	....
684..	5	.....	O	..	60	60	10	10	.....	10	.....	...	....	1	1	Y	Y
685..	1	.....	O	..	48	48	20	15	3	18	.....	...	....	....	2	..	..
686..	2	.....	L	..	60	60	16	14	.....	14	.....	...	....	....	....	....	....
687..	9	.....	O	..	120	120	80	80	.....	80	.....	...	....	....	1	Y	Y
688..	3	.....	O	..	144	144	22	20	2	22	.....	...	....	....	....	....	....
689..	5	1	O	..	60	60	90	90	.....	90	3	...	....	1	2	Y	Y
690..	2	.....	L	..	60	60	12	3	8	11	.....	...	....	....	....	....	....
691..	6	1	O	..	144	144	45	45	.....	45	6	...	....	....	6	Y	Y
692..	1	.....	O	..	144	144	7	7	.....	7	.....	...	....	....	....	....	....
693..	1	.....	O	..	48	48	9	8	1	9	.....	...	....	1	2	Y	Y
694..	5	.....	O	..	40	40	10	10	.....	10	.....	...	....	....	....	....	....
695..	5	.....	O	..	54	54	33	33	.....	33	.....	...	....	....	....	....	....
696..	2	.....	O	..	60	60	90	90	.....	90	.....	...	....	2	1	Y	Y
697..	.....	1	O	..	60	60	60	60	.....	60	.....	...	....	1	2	..	..
698..	3	.....	O	..	60	60	116	116	.....	116	2	...	....	2	1	..	..
699..	3	.....	O	..	60	60	15	3	.....	3	.....	...	....	1	2	N	N
700..	5	.....	O	..	60	60	78	78	.....	78	.....	...	....	....	3	Y	N
701..	1	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	....	....	....
702..	5	.....	O	..	60	60	100	40	....	40	.....	...	....	4	2	Y	Y
703..	1	.....	O	..	60	60	25	15	.....	15	.....	...	....	....	....	....	....
704..	3	.....	O	..	60	60	.....	.....	.....	.....	.....	...	....	....	....	....	....
705..	3	2	O	..	120	120	125	125	.....	125	.....	...	....	4	6	Y	Y
706..	7	.....	O	..	60	60	50	20	.....	20	.....	...	....	2	1	..	..
707..	1	.....	L	..	60	60	5	2	3	5	.....	...	....	....	....	....	....
708..	3	.....	O	..	60	60	12	12	.....	12	.....	...	....	....	....	....	....

LANGLADGE COUNTY.

Running number.	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
670..	.....	N	.....	.....	.....	.....	Y	.....	.....	...	22	....	2	1	75	....	....
671..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	10	....	....
672..	O	..	1	Y	D	Y	N	Y	.....	G	52	1	2	3	144	....	....
673..	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	35	....	....
674..	I	..	.....	.....	.....	.....	..	.....	.....	G	30	....	3	1	125	....	....
675..	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	3	1	75	....	....
676..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	1	5	....	....
677..	O	.....	.....	.....	.....	.....	..	.....	.....	G	22	....	1	1	40	....	....

VILAS COUNTY.

678..	O	N	.....	.....	.....	.....	..	Y	.....	G	40	1	7	....	650	....	....

TREMPEALEAU COUNTY.

679..	O	..	.....	.....	.....	.....	.....	Y	.....	G	.....	....	....	....	....	....	....
680..	.....	..	.....	.....	.....	.....	Y	..	.....	G	.....	....	....	....	....	....	....
681..	N	..	.....	.....	.....	.....	N	Y	.....	G	52	....	1	1	60	....	....
682..	.....	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....

ASHLAND COUNTY.

683..	O	..	.....	.....	.....	.....	Y	Y	.....	G	52	....	....	....	....	....	....
684..	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	50	....	....
685..	I	..	.....	.....	.....	.....	.....	..	.....	F	50	....	....	....	....	....	....
686..	I	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	....	....	....	10
687..	O	..	1	Y	G	Y	..	..	.....	G	60	1	5	5	850	....	....
688..	O	..	.....	.....	.....	.....	N	..	Y	G	52	....	4	4	650	....	....
689..	O	..	.....	.....	.....	.....	Y	..	.....	G	16	....	6	1	200	....	....
690..	I	..	.....	.....	.....	.....	N	..	.....	F	52	1	1	1	17	....	....
691..	O	..	.....	.....	.....	.....	Y	..	.....	G	16	....	4	2	200	....	....
692..	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	3	7	....	....	....
693..	I	..	.....	.....	.....	.....	..	..	Y	G	52	....	....	....	....	....	....
694..	.....	..	.....	.....	.....	.....	.....	.....	.....	.....	30	....	....	....	....	....	....
695..	O	..	.....	.....	.....	.....	Y	Y	.....	G	52	....	1	1	30	....	....
696..	S	..	.....	.....	.....	.....	N	..	.....	G	28	....	6	2	100	....	....
697..	O	..	.....	.....	.....	.....	..	..	Y	G	20	....	3	2	250	....	....
698..	S	..	.....	.....	.....	.....	..	..	.....	G	52	2	10	3	735	....	....
699..	.....	..	.....	.....	.....	.....	..	..	.....	F	50	1	1	1	60	....	....
700..	O	..	.....	.....	.....	.....	Y	Y	.....	G	2	....	6	3	550	....	....
701..	I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	2	2	100	....	....
702..	O	..	.....	.....	.....	.....	Y	Y	.....	G	50	....	2	1	30	....	....
703..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52	....	2	2	100	....	.
704..	O	N	.....	.....	.....	.....	N	Y	.....	F	.....	....	1	1	200	....	....
705..	S	..	.....	.....	.....	.....	..	..	.....	G	.....	....	3	1	400	....	....
706..	.....	.....	.....	.....	.....	.....	..	..	.....	G	50	1	2	2	160	....	....
707..	O	N	.....	.....	.....	.....	Y	..	.....	G	.....	....	....	....	....	....	....
708..	O	..	.....	.....	.....	.....	.....	Y	.....	G	52	....	1	1	16	....	....

APPLETON.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
709..	1	.....	O	R	60	60	10	6	.....	6	....	....	....	....	1	Y	Y
710..	6	4	O	..	60	60	100	70	3	73	14	1	1	2	2	..	..
711..	1	.....	L	..	66	66	4	2	2	4	....	....	....	....	....	....	....
712..	2	.....	O	..	66	60	6	5	.....	5	....	....	....	....	2	Y	Y
713..	3	.....	O	..	66	65	5	6	.....	5	....	....	....	....	2	..	..
714..	P 1	.....	L	..	60	60	12	8	3	11	3	....	....	1	....	..	..
715..	3	.....	O	..	60	60	10	4	.....	4	....	....	....	....	2	..	....
716..	2	.....	O	..	60	60	29	3	26	29	4	....	....	....	1	..	Y
717..	5	.....	O	..	60	60	50	36	.....	36	....	....	....	....	1	..	..
718..	2	.....	O	..	60	60	25	4	8	12	6	....	....	1	1	..	..
719..	P 1	.....	L	..	60	60	15	9	6	15	4	....	....	....	....	....	....
720..	P 3	.....	L	..	70	70	12	3	5	8	3	....	....	....	1	Y	Y
721..	P 1	.....	O	..	60	60	12	10	.....	10	....	....	....	....	2	..	..
722..	1	.....	O	..	66	66	2	3	.....	3	....	....	....	....	1	..	..
723..	P 1	.....	L	..	60	60	6	6	.....	6	....	....	....	1	....	..	..
724..	1	.....	L	..	60	60	12	10	2	12	....	....	....	....	1	..	..
725..	P 1	.....	L	..	60	60	30	2	6	8	....	....	....	....	2	..	..
726..	2	.....	O	..	60	60	25	17	3	20	....	....	....	....	1	..	..
727..	3	1	O	..	60	60	61	35	26	61	4	....	....	....	2	..	..
728..	4	1	O	..	144	144	75	40	15	55	....	....	....	....	1	..	..
729..	6	.....	O	..	144	144	60	60	.....	60	....	....	....	....	2	..	..
730..	3	.....	O	..	60	60	8	5	.....	5	....	....	....	1	1	..	..
731..	2	.....	L	..	60	60	5	2	.....	2	....	....	....	....	....	....	....
732..	5	8	O	..	144	144	250	82	75	157	....	....	....	....	6	Y	Y
733..	4	3	O	..	144	144	81	41	40	81	....	....	2	....	4	..	..
734..	P 1	.....	L	..	60	60	50	1	27	28	12	....	....	....	1	..	..
735..	1	.....	O	..	60	60	10	7	.....	7	2	....	....	....	....	....	....
736..	6	.....	O	..	54	54	25	20	.....	20	....	....	....	....	1	Y	Y
737..	4	.....	O	..	60	60	10	7	.....	7	....	....	....	....	1	....	....
738..	8	1	O	..	144	144	160	137	.....	137	....	....	....	....	3	Y	Y
739..	2	3	O	..	60	60	13	13	.....	13	....	....	....	....	1	..	..
740..	4	.....	O	..	144	144	100	60	40	100	....	....	....	2	1	..	..
741..	3	.....	O	..	144	144	16	16	.....	16	....	....	....	1	1	..	..
742..	P 1	.....	L	..	60	60	9	6	3	9	....	....	....	....	1	..	..
743..	4	1	O	..	144	144	60	48	.....	48	3	....	....	....	2	..	..
744..	.....	P 1	O	..	60	60	20	8	.....	8	1	....	....	....	1	..	..
745..	3	.....	O	..	54	54	5	2	.....	2	....	....	....	....	1	..	..
746..	5	2	O	..	52	60	60	12	.....	12	12	....	....	....	3	..	..
747..	1	.....	L	..	60	60	6	4	.....	4	....	....	....	....	1	..	..
748..	3	1	O	..	144	144	112	88	24	112	....	....	1	....	1	..	..
749..	3	.....	O	..	60	60	30	27	.....	27	....	....	....	....	2	..	..
750..	6	.....	O	..	60	60	25	12	.....	12	....	....	....	....	1	..	..
751..	2	.....	O	..	60	60	5	4	.....	4	....	....	....	....	1	..	..
752..	2	.....	O	..	54	54	5	3	.....	3	....	....	....	....	1	..	..
753..	4	.....	O	..	60	60	25	18	.....	18	1	....	....	....	2	..	..
754..	2	1	O	..	66	66	15	11	.....	11	....	....	....	....	2	..	..
755..	2	2	O	..	144	144	16	16	.....	15	....	....	2	2	3	..	..
756..	2	.....	O	I	60	60	35	5	.....	6	....	....	....	1	1	Y	Y

OUTAGAMIE COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
709..	I	N	....	....	....	....	Y	....	....	F	45	....	....	....	....	350	....
710..	I	..	1	Y	S	Y	..	....	....	G	52	....	1	1	25	25	....
711..	I	..	....	....	....	....	..	Y	....	G	9	....	....	....	....	....	3
712..	I	..	....	....	....	....	..	....	....	G	52	....	2	2	45	....	....
713..	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	500	....
714..	I	..	....	....	....	....	..	Y	....	G	52	....	....	1	....	....	3
715..	O	..	....	....	..	....	..	....	....	F	52	....	....	....	....	20	....
716..	O	..	....	....	....	....	..	Y	Y	G	52	....	....	....	....	5	....
717..	I	..	....	....	....	....	....	..	....	G	52	....	....	1	....	80	35
718..	I	..	....	....	....	....	Y	....	Y	G	52	....	1	1	20	....	....
719..	I	..	....	....	....	....	..	Y	..	G	52	....	....	....	....	....	4
720..	I	..	....	....	....	....	..	..	..	G	52	....	1	1	14	....	....
721..	O	..	1	Y	D	Y	..	..	....	G	52	....	....	1	....	....	3
722..	I	..	....	....	....	....	....	..	....	G	52	....	2	1	125	500	....
723..	I	..	....	....	....	....	1	..	....	G	52	....	....	1	....	....	1
724..	I	..	....	....	....	....	Y	....	....	G	52	....	1	1	10	....	....
725..	O	..	....	....	....	....	..	Y	Y	G	51	....	....	1	....	....	2½
726..	I	..	....	....	....	....	..	..	..	G	48	....	1	1	10	....	....
727..	I	..	1	Y	T	Y	..	..	..	G	52	....	1	1	60	100	....
728..	I	..	1	..	T	..	..	..	..	G	52	....	2	1	400	500	....
729..	I	..	....	....	....	....	..	..	....	G	52	....	2	....	....	1500	....
730..	I	..	1	Y	T	....	..	....	....	G	52	....	....	....	....	35	....
731..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	10	6	....
732..	S	..	7	Y	T	....	..	Y	Y	G	52	....	11	4	1500	1000	....
733..	I	..	2	..	D	..	..	..	..	G	52	....	6	1	700	600	....
734..	I	..	....	....	....	....	..	..	..	G	....	....	....	....	....	....	6
735..	I	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
736..	I	..	....	....	....	....	Y	....	....	G	26	....	....	....	....	55	....
737..	....	....	....	....	....	....	..	....	....	G	52	....	1	1	90	....	30
738..	I	N	....	....	....	....	..	....	....	G	46	....	8	....	....	600	....
739..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	15	....	....
740..	I	..	3	Y	S	Y	..	Y	Y	G	52	....	6	2	450	500	....
741..	I	..	....	....	....	....	Y	....	....	F	52	....	....	....	....	....	400
742..	I	..	....	....	....	....	..	....	Y	G	52	....	....	....	....	....	5
743..	S	..	1	Y	B	Y	..	....	....	F	52	....	3	1	30	....	....
744..	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
745..	I	..	1	Y	T	Y	Y	....	....	F	52	....	1	1	35	15	....
746..	I	..	....	....	....	....	..	Y	....	G	52	....	2	2	....	42	....
747..	I	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
748..	I	..	3	Y	T	Y	Y	Y	Y	G	46	....	5	1	700	1000	....
749..	I	..	....	....	....	....	..	..	....	G	52	....	1	1	35	25	....
750..	S	..	....	....	....	....	..	....	....	G	52	....	....	....	....	40	....
751..	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	35	....
752..	I	..	....	....	....	....	..	....	....	G	48	....	1	1	8	....	....
753..	O	..	....	....	....	....	..	....	....	G	52	....	1	1	65	....	....
754..	I	..	....	....	....	....	..	....	....	G	52	....	2	1	160	....	....
755..	I	..	....	....	....	....	..	....	....	G	52	....	2	1	150	....	....
756..	O	..	....	....	....	....	Y	Y	....	G	11	....	....	....	....	....	....

ATHENS.

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
757..	2	.....	O	R	66	66	24	24	.....	24	2	....	....	2	1	Y	Y
758..	3	.....	O	..	60	60	20	10	.....	10	2	....	....	2	1	..	..
759..	3	.....	O	..	60	60	125	100	.....	100	.....	....	....	3	4	..	..
BANGOR.																	
760..	4	3	O	..	60	60	10	10	.....	10	.....	....	....	....	5	..	..
BARABOO.																	
761.. P	1	.....	L	R	60	60	13	11	2	13	.....	....	....	....	1	..	..
762..	1	.....	O	..	60	60	5	3	2	6	.....	....	....	....	....	....	....
763..	1	.....	O	..	59	40	125	125	.....	125	2	....	....	....	....	....	N
764..	1	.....	O	..	60	60	12	4	8	12	.....	....	....	....	....	....	....
765..	4	1	O	..	60	60	140	36	35	71	6	....	1	....	1	Y	Y
766..	1	.....	O	..	60	60	25	10	15	25	2	....	....	....	1	..	..
767.. P	1	.....	L	..	60	60	5	5	.....	6	.....	....	....	....	2	..	..
BARRON.																	
768..	1	1	O	..	60	60	6	5	.....	5	.....	....	....	1	2	..	..
769..	8	.....	O	..	60	60	25	18	.....	18	8	....	....	....	....	....	....
770..	2	.....	O	..	60	60	33	8	9	17	.....	....	....	2	1	Y	Y
771..	4	.....	O	..	60	60	25	8	.....	8	.....	....	....	....	....	....	....
BAYFIELD.																	
772.. P	1	.....	O	..	60	60	5	3	.....	3	.....	....	....	....	....	....	....
773..	5	.....	O	..	60	60	40	34	.....	34	.....	....	....	1	3	Y	Y
774..	5	.....	O	..	60	60	64	64	.....	64	.....	....	....	2	2	..	..
775..	.....	.....	L	..	60	60	5	5	.....	6	1	1	....	....	....	....	....
BEAR CREEK.																	
776..	2	.....	O	..	60	60	10	8	.....	8	.....	....	....	....	1	..	..
777..	4	.....	O	..	60	60	3	3	.....	3	.....	....	....	....	1	..	..
778..	2	.....	O	..	60	60	10	10	.....	10	.....	....	....	....	....	..	..
BEAVER CREEK.																	
779..	2	.....	O	..	60	60	16	16	.....	16	3	....	....	....	....	....	....
BEAVER DAM.																	
780..	2	1	O	R	66	66	175	70	91	161	50	....	3	....	2	Y	Y
781..	2	.....	O	..	60	60	100	80	2	82	8	....	....	....	1	..	..
782..	2	.....	O	..	66	66	76	50	25	75	7	....	....	1	1	..	..
783..	5	1	L	..	60	60	125	56	51	107	9	....	2	....	2	..	..
784..	1	1	O	..	66	66	3	3	.....	3	.....	....	....	....	2	..	..
785..	4	2	O	..	60	60	100	99	1	100	.....	....	1	....	2	..	..

MARATHON COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
757..	O	N	.....	.....	....	.....	Y	Y	.....	....	40	....	2	1	93	....	....
758..	S	..	.....	.....	....	.....	..	..	.....	....	25	....	1	1	60	....	....
759..	O	..	.....	.....	....	.....	..	..	.....	G	48	....	6	4	350	....	....

LA CROSSE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
760..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	2	2	70	....	....

SAUK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
761..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	....	1	....	....	2½
762..	.....	.....	.....	.....	....	.....	..	..	.....	G	52	....	....	....	....	....	....
763..	.....	N	.....	.....	....	.....	..	...	.....	G	52	....	2	1	50	....	....
764..	.....	..	.....	.....	....	.....	.....	..	Y	G	52	....	1	1	12	....	....
765..	I	..	1	Y	D	Y	Y	..	..	G	29	....	2	1	100	....	....
766..	I	..	.....	.....	....	.....	..	..	..	G	52	....	....	....	....	18	....
767..	I	..	.....	.....	....	.....	.....	Y	.....	G	52	....	....	....	....	....	....

BARRON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
768..	O	..	.....	.....	....	.....	Y	..	.....	....	52	....	....	....	....	80	....
769..	O	..	.....	.....	....	.....	..	..	.....	G	20	....	2	2	100	....	....
770..	O	..	.....	.....	....	.....	..	.....	.....	G	45	....	....	....	....	80	....
771..	O	.....	.....	.....	....	.....	.....	Y	.....	G	45	....	2	1	75	....	....

BAYFIELD.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
772..	O	..	.....	.....	....	.....	Y	..	.....	G	52	....	....	....	....	1	....
773..	O	..	.....	.....	....	.....	..	..	.....	G	36	....	1	1	15	....	....
774..	S	..	.....	.....	....	.....	..	..	.....	G	26	....	....	....	....	....	....
775..	S	..	.....	.....	..	.....	..	..	....	....	25	....	1	1	25	....	....

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
776..	O	..	.....	.....	....	.....	..	.....	.....	G	35	....	2	1	40	....	....
777..	S	..	.....	.....	....	.....	N	.....	.....	G	45	....	1	1	30	....	....
778..	O	..	.....	.....	....	.....	Y	.....	.....	G	35	....	1	1	35	....	....

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
779..	.....	.....	.....	.....	....	.....	Y	.....	.....	....	.....	....	....	....	....	....	....

DODGE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
780..	I	N	1	Y	A	.....	Y	Y	Y	G	50	....	3	1	250	150	....
781..	S	..	.....	.....	....	.....	..	..	.....	G	50	....	1	1	60	....	....
782..	O	..	.....	.....	....	.....	..	..	Y	F	30	....	2	1	75	75	....
783..	I	..	1	Y	A	Y	..	..	..	G	50	....	2	1	75	100	....
784..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	75	60	....
785..	I	..	1	Y	T	Y	Y	Y	.....	G	45	....	1	1	75	....	....

BELDENVILLE.

Running number.	Buildings.		Plant.		Hours per Week.		Employés.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
786..	3	.....	O	R	60	60	30	18	.....	18	3	....	....	....	....	....	....

BELLE PLAIN.

787..	1	.....	O	..	60	60	4	4	.....	4	....	....	....	....	....	....	....
788..	1	.....	O	..	60	60	3	3	.....	3	1	....	....	....	....	....	....
789..	2	.....	O	..	60	60	10	8	.....	8	2	....	....	1	....	Y	Y

BELOIT.

790..	8	.....	O	..	144	144	35	33	.....	33	.....	....	....	....	4	..	..
791..	2	.....	O	..	60	60	6	6	.....	6	.....	....	....	1	2	..	..
792..	.....	P 1	L	..	60	60	5	5	.....	5	.....	....	....	....	....	..	..
793..	2	.....	O	..	66	66	7	3	.....	3	.....	....	....	....	....	....	....
794..	1	.....	O	..	60	60	25	18	7	25	.....	....	....	....	2	Y	Y
795..	4	.....	O	..	60	60	120	99	.....	99	4	....	....	....	1	..	..
796..	1	.....	O	..	60	60	10	4	3	7	.....	....	....	....	....	....	....
797..	11	2	O	..	59	59	152	152	.....	152	4	....	....	....	3	Y	Y
798..	4	.....	L	..	60	54	25	16	.....	16	2	....	....	....	1	..	..
799..	6	1	O	..	144	144	18	15	.....	15	.....	....	....	1	....	Y	Y
800..	P 1	.....	O	..	60	60	10	4	4	8	.....	....	....	....	....	....	....
801..	3	.....	O	..	60	60	50	30	.....	30	1	....	....	....	2	Y	Y
802..	4	.....	O	..	60	60	10	10	.....	10	.....	....	....	....	1	..	..
803..	1	.....	L	..	60	60	7	3	1	4	.....	....	....	....	....	....	....
804..	P 1	.....	O	..	60	60	15	3	8	11	.....	....	....	....	1	Y	Y
805..	P 2	.....	O	..	60	60	.....	2	3	5	.....	....	....	1	1	Y	Y
806..	20	.....	O	..	60	60	500	450	.....	450	21	....	....	1	1	..	..
807..	1	.....	O	..	60	60	25	6	.....	6	.....	....	....	1	1	..	..
808..	4	.....	O	..	60	60	150	80	60	140	25	....	....	....	2	..	..
809..	2	.....	O	..	60	60	10	10	.....	10	.....	....	....	....	....	....	....
810..	1	.....	L	..	60	60	5	3	.....	3	.....	....	....	....	1	Y	Y
811..	3	1	O	..	60	60	25	20	.....	20	2	....	....	....	2	..	..
812..	2	.....	O	..	60	60	6	4	.....	4	.....	....	....	1	....	..	..
813..	2	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	2	..	..
814..	1	.....	L	..	60	60	5	5	.....	5	.....	....	....	1	....	..	..
815..	P 2	.....	L	I	60	....	25	.....	.....	.....	.....	....	....	....	....	....	....
816..	2	.....	O	R	60	60	6	3	.....	3	.....	....	....	....	1	Y	Y
817..	1	.....	O	..	60	60	5	1	.....	1	.....	....	....	1	....	..	..
818..	P 1	.....	L	..	60	60	15	5	3	8	.....	....	....	....	1	..	..
819..	1	.....	O	..	60	60	50	4	8	12	.....	....	....	....	1	..	..
820..	5	.....	O	I	144	....	21	.....	.....	.....	.....	....	....	....	2	....	....
821..	2	.....	O	R	60	60	200	20	150	170	35	....	....	....	2	Y	Y
822..	2	.....	O	..	66	66	5	3	.....	3	.....	....	....	....	....	....	....
823..	6	6	O	..	60	60	100	97	.....	97	7	....	1	....	2	Y	Y

BENOIT.

824..	1	.....	O	I	60	....	31	.....	.....	.....	.....	....	....	....	....	....	....

PIERCE COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
786..	O	N	.....	.....	.....	.....	.....	Y	.....	F	33	1	2	1	60	....	....

SHAWANO COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
787..	O	.....	.....	.....	.....	.....	Y	.....	.....	G	6	....	1	1	12	....	....
788..	I	N	.....	.....	.....	.....	Y	.....	.....	G	9	....	1	1	12	....	....
789..	O	..	.....	.....	.....	.....	N	.....	.....	G	13	....	1	1	35	....	....

ROCK COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
790..	I	..	2	Y	T	Y	Y	.....	.....	F	52	....	6	2	450	275	....
791..	I	..	1	Y	B	..	.....	.....	.....	G	52	....	1	1	6	....	....
792..	I	..	.....	.....	.....	.....	Y	Y	.....	G	52	....	....	1	....	....	2
793..	I	..	.....	.....	.....	.....	N	.....	.....	G	52	....	2	2	358	....	....
794..	I	..	.....	.....	.....	.....	Y	Y	Y	G	52	....	....	1	....	....	5
795..	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	1	85	100	....
796..	I	..	.....	.....	.....	.....	..	..	Y	G	52	....	1	1	10	....	....
797..	S	..	2	Y	B	Y	..	..	.....	G	52	....	2	1	200	....	....
798..	I	..	.....	.....	.....	.....	..	.....	.....	F	52	....	....	....	....	40	....
799..	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	100	125	....
800..	I	..	.....	.....	.....	.....	.....	Y	Y	G	44	....	....	....	....	....	....
801..	S	..	.....	.....	.....	.....	Y	.....	.....	G	45	....	1	1	28	....	....
802..	I	..	.....	.....	.....	.....	N	Y	.....	F	52	....	1	1	35	55	....
803..	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
804..	I	..	.....	.....	.....	.....	Y	Y	Y	G	52	....	1	1	10	....	....
805..	I	..	.....	.....	.....	.....	Y	.....	Y	G	52	....	1	1	5	....	....
806..	O	..	1	Y	B	Y	..	Y	.....	G	52	2	3	4	250	....	....
807..	O	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
808..	I	..	1	Y	B	Y	Y	Y	Y	G	52	....	2	1	35	....	....
809..	I	..	.....	.....	.....	.....	.....	.....	.....	G	62	....	....	....	....	....	....
810..	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	15	....	....
811..	I	..	1	Y	B	Y	..	.....	.....	G	52	....	....	....	....	15	....
812..	I	..	1	.....	.....	.....	..	.....	.....	G	52	....	1	1	12	....	....
813..	I	..	.....	.....	.....	.....	..	.....	.....	G	62	....	....	....	15	....	....
814..	I	..	.....	.....	.....	.....	..	.....	.....	G	62	....	1	1	6	....	....
815..	I	..	.....	.....	.....	.....	..	Y	.....	G	....	....	....	1	3	....	....
816..	I	..	.....	.....	.....	.....	..	.....	.....	G	42	....	1	2	6	....	5
817..	I	..	.....	.....	.....	.....	.....	.....	.....	G	62	....	....	....	....	....	....
818..	I	..	.....	.....	.....	.....	.....	Y	Y	G	52	....	....	....	....	....	....
819..	I	..	1	Y	B	Y	Y	Y	Y	G	52	....	....	....	....	....	....
820..	O	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	....	2	1	20	25	....
821..	I	N	1	Y	G	Y	Y	Y	Y	G	62	....	2	1	....	....	5
822..	.....	.....	.....	.....	.....	.....	Y	.....	.....	G	62	....	1	2	276	60	....
823..	O	N	2	Y	G	Y	..	Y	.....	G	62	....	2	1	300	....	....

BAYFIELD COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
824..	I	N	.....	.....	.....	.....	N	N	.....	B	14	....	1	1	80	....	....

BERLIN.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
825..	1	.....	O	R	60	60	8	4	.....	4	.....	....	....	1	....	Y	....
826..	1	.....	O	..	120	120	5	3	.....	3	.....	....	....	....	....	....	....
827..	1	.....	L	..	60	60	12	5	7	12	.....	....	....	....	....	....	....
828..	1	.....	O	..	120	120	6	6	.....	6	.....	....	....	1	1	Y	Y
829..	1	.....	O	..	60	60	5	4	.....	4	.....	....	....	1	1	..	..
830..	P 1	.....	L	..	60	84	27	5	22	27	.....	....	....	....	2	..	..
831..	.....	.....	O	..	60	60	300	31	1	32	.....	....	....	....	....	....	....
832..	P 1	.....	L	..	60	60	28	2	4	6	.....	....	....	....	1	Y	Y
833..	.....	.....	O	..	60	60	30	9	16	25	7	....	....	....	1	..	..
834..	1	.....	L	..	60	60	15	9	.....	9	3	....	....	....	....	....	....
835..	P 1	.....	L	..	60	84	66	4	19	23	2	....	....	1	....	Y	Y
836..	1	.....	O	..	60	60	50	15	32	47	10	....	....	1	2	..	..
837..	1	1	O	..	60	108	35	26	4	30	.....	....	....	....	1	..	..
838..	1	.....	O	..	60	60	2	1	.....	1	.....	....	....	....	....	....	....
839..	P 1	.....	O	..	60	60	12	3	9	12	.....	....	....	....	1	Y	Y
840..	1	.....	O	..	60	60	5	2	3	5	.....	....	....	1	1	..	..
841..	1	.....	O	..	60	60	16	16	.....	16	.....	....	....	....	....	....	....
842..	3	.....	O	..	60	60	14	14	.....	14	.....	....	....	....	1	Y	Y
843..	1	.....	O	..	48	48	8	6	2	8	1	....	....	1	1	..	..
844..	1	.....	O	..	60	60	2	2	.....	2	.....	....	....	1	1	Y	Y
845..	2	.....	O	..	60	60	5	3	.....	3	.....	....	....	1	1	..	..
846..	1	.....	O	I	72	....	3	.....	.....	.....	.....	....	....	....	....	....	....

BIRNAMWOOD.

847..	2	.....	O	I	60	....	20	.....	.....	.....	.....	....	....	1	1	Y	Y
848..	2	.....	O	..	60	....	30	.....	.....	.....	.....	....	....	....	1	..	..
849..	2	.....	O	..	60	....	35	.....	.....	.....	.....	....	....	....	1	..	..
850..	3	.....	O	R	66	66	16	16	.....	16	2	....	....	....	1	..	..

BLACK CREEK.

851..	2	.....	O	..	60	60	18	4	.....	4	2	....	....	....	1	..	..

BLOOMER.

852..	2	.....	O	R	60	60	5	4	.....	4	.....	....	....	....	....	....	....
853..	2	.....	O	..	60	60	3	2	.....	2	.....	....	....	1	1	Y	Y

BOARDMAN.

854..	4	.....	L	I	60	....	3	.....	.....	.....	.....	....	....	1	2	..	..

GREEN LAKE COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
825..	S	N	....	....	....	....	N	Y	....	G	50	....	....	1	....	....	10
826..	O	..	....	....	....	....	..	..	....	G	52	....	1	1	100	....	....
827..	....	....	....	....	....	....	....	..	Y	G	52	....	....	....	....	....	....
828..	S	N	1	Y	....	Y	Y	..	....	G	25	....	....	....	....	....	..
829..	....	....	....	....	....	....	N	..	....	F	52	....	1	1	15	....	....
830..	I	N	....	....	....	....	....	..	N	F	52	....	....	....	....	....	....
831..	....	....	....	....	....	....	....	....	....	....	32	....	3	4	150	....	....
832..	I	N	....	....	....	....	....	Y	N	F	45	....	....	....	....	....	....
833..	I	..	....	....	....	....	....	..	Y	G	16	....	....	....	....	....	....
834..	....	..	....	....	....	....	....	..	....	G	48	....	....	....	....	....	....
835..	I	..	....	....	....	....	....	..	Y	G	....	....	....	....	....	....	....
836..	S	..	....	....	....	....	....	..	N	B	24	....	....	....	....	....	....
837..	....	....	....	....	....	....	Y	..	..	G	52	....	2	1	200	....	....
838..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
839..	I	N	....	....	....	....	....	Y	Y	F	46	....	....	....	....	....	....
840..	I	..	....	....	....	....	....	..	..	G	....	....	1	1	20	....	....
841..	....	....	....	....	....	....	....	..	....	G	20	....	1	1	30	....	....
842..	S	N	1	Y	....	N	N	..	....	G	48	....	1	1	12	....	....
843..	I	..	....	....	....	....	Y	..	Y	G	60	....	....	....	....	....	....
844..	O	..	....	....	....	....	N	....	....	G	52	....	1	1	20	....	....
845..	O	..	....	....	....	....	..	....	....	G	52	....	1	1	35	....	....
846..	I	..	....	....	....	....	Y	....	....	G	45	....	2	....	65	....	....

SHAWANO COUNTY

847..	I	..	....	....	....	....	Y	....	....	G	4	....	1	1	45	....	....
[illegible]	I	..	....	....	....	....	..	....	....	G	32	....	1	1	50	....	....
849..	S	..	....	....	....	....	..	....	....	G	4	....	4	1	65	....	....
850..	S	..	....	....	....	....	N	....	....	G	52	....	2	1	45	....	....

OUTAGAMIE COUNTY.

851..	I	..	....	....	....	....	N	Y	....	G	37	....	1	1	25	....	....

CHIPPEWA COUNTY.

852..	O	N	....	....	....	....	Y	Y	....	....	25	....	1	1	15	....	....
853..	O	..	....	....	....	....	..	..	....	G	35	....	1	1	20	....	....

ST. CROIX COUNTY.

854..	..	..	....	....	....	....	..	..	....	G	....	....	....	....	....	150	....

BRILLION.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
855..	1	.....	O	I	60	....	10	.....	.....	.....	.....	...	....	....	1	....	....
856..	4	1	O	R	60	60	50	30	.....	30	2	...	....	....	1	Y	Y
857..	3	.....	O	..	60	60	6	5	.....	5	.....	...	....	....	1	..	..
858..	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
859..	2	1	O	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
860..	P 3	.....	O	..	60	60	8	3	.....	3	.....	...	....	....	1	..	..

BRODHEAD.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
861..	1	.....	O	..	66	66	1	1	.....	1	.....	...	....	....	1	..	..
862..	2	.....	O	..	60	60	8	8	.....	8	.....	...	....	1	1	..	..
863..	3	.....	O	..	60	60	10	5	.....	5	.....	...	....	1	2	..	..
864..	2	.....	O	..	60	60	5	3	.....	3	.....	...	....	1	....	..	..
865..	.....	P 1	L	..	60	60	5	3	2	5	.....	...	....	....	1	..	..
866..	P 2	.....	L	..	60	60	6	1	4	5	.....	...	....	....	....	....	....
867..	3	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	2	Y	Y
868..	2	.....	O	..	60	60	25	8	.....	8	.....	...	....	....	1	..	..
869..	P 1	.....	L	..	60	60	3	3	.....	3	.....	...	....	....	1	..	..

BROOKVILLE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
870..	2	.....	O	I	.....	....	7	.....	.....	.....	.....	...	....	.. .	....	..	..

BURKHARDT.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
871..	1	2	O	R	60	60	11	9	2	11	.....	...	....	4	3	..	..

BURLINGTON.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
872..	2	.....	O	R	60	60	100	20	80	100	18	...	....	1	2	Y	Y
873..	6	.....	O	..	60	60	12	12	.....	12	.....	...	....	....	2	..	..
874..	2	.....	O	..	60	60	28	12	.....	12	.....	...	....	....	1	....	..
875..	4	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	1	....	....
876..	P 1	.....	L	..	60	60	8	1	3	4	1	.	....	....	1	....	....
877..	1	.....	L	..	60	60	3	1	2	3	.....	...	....	....	1	....	....
878..	P 1	.....	L	..	60	60	15	13	.....	13	4	...	....	....	1	....	....
879..	1	.....	O	..	60	60	7	6	.....	6	2	...	....	....	1	....	....
880..	5	.....	O	..	60	60	20	20	.....	20	9	...	....	1	1	Y	Y
881..	3	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	2	..	..
882..	2	.....	O	..	60	60	12	6	.....	6	.....	...	....	....	1	..	..
883..	1	.....	O	..	60	60	15	3	.....	3	.....	...	....	....	1	..	..
884..	2	.....	O	..	60	60	10	3	.....	3	.....	...	....	....	2	..	..

BARNUM.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
885..	2	.....	O	I	66	....	10	.....	.....	.....	.....	...	....	....	....	....	....

CALUMET COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
855..	I	N	.....	.....	....	.....	Y	.....	.....	G	9	....	1	1	45	....	....
856..	I	..	1	Y	D	Y	N	.....	.....	G	45	....	1	1	65	....	....
857..	I	..	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	10	....	....
858..	S	..	.....	.....	....	.....	..	.....	.....	G	13	....	1	1	45	....	....
859..	I	..	.....	.....	....	.....	..	.....	...	G	52	....	1	1	80	....	....
860..	O	..	.....	.....	....	.....	..	.....	...	G	52	....	1	1	20	....	....

GREEN COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
861..	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	....	60	....
862..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
863..	I	..	.....	.....	....	.....	.....	.....	....	G	52	....	....	....	....	....	....
864..	O	..	.....	.....	....	.....	N	.....	.....	F	52	....	1	1	7	....	....
865..	I	..	.....	.....	.....	.....	Y	Y	Y	G	52	....	....	1	....	....	....
866..	I	..	.....	.....	....	.....	..	.....	.....	G	.....	....	1	1	8	....	....
867..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
868..	O	..	.....	.....	....	.....	Y	.....	.....	G	52	....	....	....	....	40	....
869..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....

ST. CROIX COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
870..	O	N	.....	.....	....	.....	N	.....	.....	F	6	....	1	1	36	....	....

ST. CROIX COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
871..	..	..	.....	.....	....	.....	Y	Y	Y	G	45	....	2	1	100	....	....

RACINE COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
872..	O	N	2	N	B	Y	Y	Y	Y	G	52	....	1	1	10	....	....
873..	O	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	18	....	....
874..	S	..	.....	.....	....	.....	..	.....	.....	G	26	....	1	1	35	....	....
875..	I	....	.....	.....	....	.....	.....	.....	.....	....	52	....	1	1	15	....	....
876..	.....	N	.....	.....	....	.....	Y	Y	.....	G	.....	....	1	1	8	....	....
877..	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	6	....	....
878..	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
879..	I	..	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	15	....	....
880..	O	..	1	Y	B	Y	N	Y	.....	G	52	....	2	1	25	....	....
881..	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
882..	O	..	1	Y	B	Y	Y	.....	.....	G	52	2	1	1	25	....	....
883..	S	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	12	....	....
884..	O	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	15	....	....

CRAWFORD COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1898.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
885..	S	N	.....	.....	....	.....	Y	.....	.....	G	10	....	1	1	25	....	....

BELL CENTER.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
886..	2	.....	O	I	60	....	6	....	.....	.....	.....	...	....	....	....	....	....
887..	2	.....	O	R	60	30	8	8	.....	8	1	...	....	....	2	Y	Y
BOSCOBEL.																	
888..	2	1	O	R	60	60	15	5	.....	5	.....	...	....	....	1	Y	Y
889..	4	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	2	..	..
890..	2	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
891..	6	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
892..	1	.....	L	..	60	60	5	5	.....	5	1	...	....	....	1	..	..
893..	2	.....	O	I	60	.....	25	.....	.....	.....	.....	...	....	....	1	..	..
894..	1	.....	O	R	60	60	15	12	.....	12	.....	...	....	....	....	....	....
895..	3	.....	O	..	60	60	25	25	.....	25	.....	...	....	....	....	Y	Y
896..	2	.....	O	I	60	....	20	.....	.....	.....	.....	...	....	....	....	....	....
897..	2	.....	O	R	60	60	5	2	.....	2	.....	...	....	....	....	....	....
CAMERON JUNCTION.																	
898..	1	.....	O	R	60	60	2	2	.....	2	.....	...	....	....	....	....	....
CASHTON.																	
899..	1	1	O	R	60	60	5	5	.....	5	1	...	....	....	1	Y	Y
900..	.....	1	O	R	60	60	3	3	.....	3	.....	...	....	....	....	....	....
CATO.																	
901..	4	.....	O	R	66	66	2	2	.....	2	.....	...	....	....	1	Y	Y
902..	6	.....	O	I	60	.....	6	.....	.....	.....	.....	...	....	....	....	....	....
CECIL.																	
903..	3	.....	O	R	60	60	12	9	.....	9	.....	...	....	....	1	....	....
CEDARBURG.																	
904..	3	1	O	R	60	60	6	6	.....	6	.....	....	....	....	1	Y	Y
905..	3	.....	O	I	60	.....	17	.....	.....	.....	.....	...	....	....	1	..	..
906..	1	1	O	R	66	66	12	12	.....	12	.....	...	....	....	1	..	..
907..	3	1	O	..	66	66	121	56	49	105	21	4	1	1	2	..	..
908..	3	2	O	..	60	60	5	2	.....	2	.....	...	....	....	2	..	..
909..	2	.....	O	R	60	60	60	25	35	60	6	...	....	....	2	Y	Y
910..	6	.....	O	..	60	60	65	45	.....	45	3	...	....	....	1	..	..
911..	.....	2	O	R	60	60	6	3	.....	3	.....	...	....	....	1	..	..
912..	3	1	O	R	60	60	15	10	.....	10	4	...	....	....	2	..	..

CRAWFORD COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
886..	O	....	....	....	....	....	Y	....	....	G	26	....	1	1	20	....	....
887..	I	N	....	....	....	....	..	....	....	G	12	....	....	....	....	25	....

GRANT COUNTY.

888..	I	N	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
889..	O	..	....	....	....	....	Y	....	....	G	52	....	1	1	25	....	....
890..	I	..	....	....	....	....	N	....	....	G	....	....	1	1	60	....	....
891..	I	..	....	....	....	....	Y	....	....	G	....	....	....	....	....	....	....
892..	I	..	....	....	....	....	..	Y	....	G	52	....	....	1	....	....	2½
893..	I	..	....	....	....	....	..	..	Y	G	....	....	1	1	15	....	....
894..	....	....	....	....	....	....	....	....	....	G	13	....	....	....	....	....	....
895..	O	N	....	....	....	....	Y	Y	....	G	52	....	1	1	40	....	....
896..	O	....	....	....	....	....	..	....	....	G	....	....	1	1	40	....	....
897..	I	N	....	....	....	....	..	....	....	G	52	....	1	1	5	....	....

BARRON COUNTY.

898..	O	N	....	....	....	....	Y	Y	....	G	24	....	1	1	10	....	....

MONROE COUNTY.

899..	I	N	....	....	....	....	Y	Y	....	F	52	....	1	1	98	....	....
900..	S	..	....	....	....	....	..	....	....	....	45	....	....	1	2	....	....

MANITOWOC COUNTY.

901..	S	..	1	Y	B	Y	Y	....	....	G	52	....	1	1	15	....	....
902..	S	..	....	....	....	....	..	....	....	....	26	....	1	1	60	....	....

SHAWANO COUNTY.

903..	I	N	....	....	....	....	Y	....	....	G	5	....	1	1	30	....	....

OZAUKEE COUNTY.

904..	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	25	....	....
905..	I	..	....	....	....	....	..	....	....	G	....	....	1	1	16	....	....
906..	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	95	....
907..	I	..	1	Y	G	Y	..	Y	Y	G	52	....	2	1	50	40	....
908..	I	..	....	....	....	....	..	....	....	G	52	....	....	1	20	35	....
909..	O	N	....	....	....	....	Y	Y	Y	G	52	....	1	1	20	....	....
910..	S	..	1	Y	G	Y	..	..	....	G	52	....	2	1	75	....	....
911..	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	60	....
912..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	30	....	....

CEDAR FALLS.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
913..	6	.....	O	R	66	66	168	168	.....	168	.....	...	....	1	5	Y	Y
CHELSEA.																	
914..	2	.....	O	I	60	.....	42	15	.....	15	2	...	....	1	3	Y	Y
CHILTON.																	
915..	5	.....	O	R	60	60	18	12	.....	12	.....	....	....	....	1	Y	Y
916..	1	.....	O	R	60	60	5	3	.....	3	.....	....	....	....	1	..	..
917..	4	.....	O	R	60	60	7	5	.....	5	.....		....	....	2	..	..
918..	P 1	.....	O	R	60	60	10	8	.....	8	.....	....	....	....	....	....	....
919..	1	1	O	R	60	60	6	6	.....	6	.....	....	....	....	1	N	Y
920..	2	.....	O	R	60	60	5	5	.....	5	.....	....	....	1	....	Y	Y
CHIPPEWA.																	
921..	3	.....	.....	I	66	.....	20	2	.....	2	2	..:	....	3	1	Y	Y
CHIPPEWA FALLS.																	
922..	2	.....	O	R	144	144	10	6	.....	6	.....	....	....	....	....	....	....
923..	8	.....	O	..	54	54	400	112	.....	112	3	....	....	4	11	Y	Y
924..	2	2	O	..	60	60	15	10	.....	10	.....	....	....	1	2	..	..
925..	4	2	O	..	60	60	20	16	.....	16	.....	....	....	2	3	..	..
926..	4	1	O	R	60	60	20	16	.....	16	2	....	....	....	2	..	..
927..	5	.....	O	R	60	60	50	36	.....	36	.....	....	....	....	2	..	..
CLEAR LAKE.																	
928..	1	.....	L	R	60	60	2	1	.....	1	.....	...	....	....	....	....	....
CLINTONVILLE.																	
929..	3	.....	O	R	60	60	20	20	.....	20	4	....	....	....	....	....	....
930..	1	.....	O	R	60	60	7	7	.....	7	1	....	....	....	....	....	....
931..	P 2	.....	O	..	60	36	7	3	1	4	1	....	....	....	1	Y	Y
932..	2	.....	O	..	60	60	5	1	2	3	.....	....	....	....	....	....	....
933..	4	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	1	Y	Y
934..	1	1	O	..	60	60	35	25	.....	25	.....	....	....	1	2	Y	Y
935..	1	1	O	..	60	60	10	6	.....	6	2	....	....	....	2	..	..
936..	1	.....	O	I	60	.....	8	5	.....	5	.....	....	....	....	....	....	....
937..	2	.....	O	R	60	60	5	2	.....	2	.....	....	....	....	....	....	....
COLEMAN.																	
938..	1	.....	O	I	60	....	55	.....	.....	.....	2	...	....	....	....	....	....

DUNN COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
913..	S O	N	....	....	....	....	N	....	....	....	36	....	1	1	75	1500	....

TAYLOR COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
914..	N	..	....	....	....	....	....	Y	....	G	32-50	....	5	1	200	....	....

CALUMET COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
915..	S	N	....	....	....	....	Y	....	....	G	52	....	1	1	35	....	....
916..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	50	42	....
917..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
918..	I	..	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....
919..	S	..	....	....	....	....	Y	....	....	G	26	....	1	1	75	....	....
920..	I	..	....	....	....	....	..	....	....	F	52	....	1	1	6	....	....

CHIPPEWA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
921..	N	N	....	....	....	....	Y	Y	....	G	19	....	2	1	60	....	....

CHIPPEWA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
922..	N	N	....	....	....	....	Y	Y	....	....	52	....	1	1	25	480	....
923..	N	..	....	....	....	....	..	..	....	G	48	....	3	2	350	1500	....
924..	N	..	....	....	....	....	..	..	....	G	26	....	....	....	....	175	....
925..	O	..	....	....	....	....	..	..	....	G	52	....	2	2	100	....	....
926..	N	..	1	....	N	....	N	Y	....	G	40	....	1	1	35	....	....
927..	N	..	....	....	....	....	Y	Y	....	G	50	....	3	2	50	....	....

POLK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
928..	O	N	....	....	....	....	Y	Y	....	G	....	....	....	....	....	....	....

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
929..	S	N	....	....	....	....	Y	....	....	G	52	....	1	1	40	....	....
930..	O	..	....	....	....	....	N	....	....	G	13	....	1	1	25	....	....
931..	I	..	....	....	....	....	Y	....	....	G	52	....	1	1	5	....	....
932..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	8	....	....
933..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	65	80	....
934..	I O	..	....	....	....	....	Y	....	....	G	52	...	2	1	100	....	....
935..	O	..	....	....	....	....	..	....	....	G	52	....	....	....	....	66	....
936..	O	....	....	....	....	....	Y	....	....	....	13	....	1	1	50	....	....
937..	I	N	....	....	....	....	..	....	....	G	52	....	1	1	10	....	....

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
938..	....	....	....	....	....	....	....	....	....	....	15	....	3	1	....	....	....

COLUMBUS.

Running number.		Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails.
									Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
939..		3	2	O	R	66	66	15	14	1	15	2	1	....	....	6	Y	Y
COMBINED LOCKS.																		
940..		11	1	O	R	144	72	175	30	9	39	.....	...	....	1	3	Y	Y
CUMBERLAND.																		
941..		5	.....	O	R	66	66	100	100	.....	100	.....	...	....	2	3	Y	Y
942..		5	.....	O	R	66	66	6	6	.....	6	.....	...	....	....	2	..	..
943..		5	.....	L	R	60	60	20	16	.....	16	1	....	....	....	1	..	..
COLBY.																		
944..		3	.....	O	R	60	60	20	10	.....	10	.....	...	....	1	3	Y	Y
945..		6	.....	O	..	60	60	20	20	.....	20	.....	...	....	1	3	..	..
946..		1	.....	O	..	60	60	8	8	.....	8	2	...	....	....	....	....	....
DANCY.																		
947..		2	.....	O	I	60	34	45	12	.....	12	.....	...	....	1	1	Y	Y
DARLINGTON.																		
948..		1	.....	O	R	60	60	3	3	.....	3	.....	...	....	....	....	....	....
949..		2	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	1	Y	....
950..	P	1	.....	L	..	60	60	3	3	.....	3	.....	...	....	1	1	..	Y
951..		1	.....	O	..	60	60	2	2	...	2	.....	...	....	....	1	..	..
952..		1	.....	O	..	60	60	2	2	.....	2	.....	...	....	1	1	..	..
953..		1	.....	O	..	60	60	8	5	.....	5	2	...	....	....	1	..	..
DELAVAN.																		
954..		1	.....	O	R	6'	60	10	2	2	4	.....	...	....	....	....	....	....
955..		2	.....	O	..	6'	66	2	1	.....	1	.....	...	....	....	....	....	....
956..		1	2	O	..	6(	60	7	7	.....	7	.....	...	....	....	1	Y	Y
957..	P	1	.....	O	..	6(	60	5	4	1	5	.....	...	....	....	2	..	..
958..		4	.....	O	..	6(	60	5	5	.....	5	.....	...	....	....	2	..	..
959..		2	1	O	R	60	60	5	3	.....	3	.....	...	....	....	....	....	....
960..	P	1	.....	L	..	60	60	10	4	[illegible]	9	1	...	....	....	1	..	..
DE PERE.																		
961..		2	1	O	R	6(	66	12	12	.....	12	.....	...	....	....	1	Y	....
962..		3	.....	O	..	60	60	5	4	.....	4	.....	...	....	....	1	....	Y
963..		5	.....	O	..	60	54	25	20	.....	20	.....	...	....	1	2	Y	..
964..		4	.....	O	..	60	60	20	14	.....	14	.....	...	....	....	1	..	..
965..		3	6	O	..	60	60	300	117	153	270	....	....	2	....	5	..	..
DOWNING.																		
966..		5	.....	O	I	60	....	65	.....	.....	.....	.....	...	...	2	1	N	N

COLUMBIA COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition	Weeks in operation, 1896.	Number of accidents.	Number of boilers	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
939..	I	N	....	....	....	....	Y	Y	....	G	44–52	....	2	3	110	....	....
OUTAGAMIE COUNTY.																	
940..	I	N	4	Y	T	Y	Y	Y	Y	G	26	....	10	....	....	5400	....
BARRON COUNTY.																	
941..	S O	N	....	....	....	....	N	Y	....	G	30	1	6	2	220	....	....
942..	.....	..	....	....	....	....	Y	..	....	G	50	....	1	1	35	....	....
943..	O	..	....	....	....	....	N	..	....	G	30	....	1	2	65	....	....
MARATHON COUNTY.																	
944..	O	N	....	....	....	....	Y	....	....	F	30	....	2	1	40	....	....
945..	I	..	....	....	....	....	..	Y	....	G	40	....	1	1	30	....	....
946..	O	..	....	....	....	....	N	Y	....	G	50	....	1	1	30	....	....
PORTAGE COUNTY.																	
947..	O	N	....	....	....	....	Y	Y	....	G	32	....	2	1	75	....	....
LAFAYETTE COUNTY.																	
948..	I	..	....	....	....	....	Y	....	....	G	52	....	....	1	2	....	....
949..	I	..	....	....	....	....	N	....	....	G	13	....	....	....	....	150	....
950..	I	..	....	....	....	....	Y	....	....	G	52	....	....	1	2	....	....
951..	S	..	....	....	....	....	..	....	....	G	17	....	1	1	10	....	....
952..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	15	....	....
953..	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	....	....
WALWORTH COUNTY.																	
954..	I	N	....	....	....	....	Y	Y	....	G	52	....	1	1	15	....	....
955..	I	..	....	....	....	....	N	....	....	G	52	....	1	1	110	....	....
956..	I	..	....	....	....	....	Y	....	....	G	52	....	1	....	....	85	...
957..	I	..	....	....	....	....	..	Y	....	G	52	....	....	1	2	....	....
958..	I	..	....	....	....	....	..	....	....	G	26	....	1	1	15	....	....
959..	.....	.....	....	....	....	....	....	....	....	....	40	....	1	1	35	....	....
960..	I	N	....	....	....	....	....	Y	Y	G	45	....	....	....	....	....	....
BROWN COUNTY.																	
961..	I	N	....	....	....	....	Y	....	....	G	52	....	1	....	....	125	....
962..	I	..	....	....	....	....	..	....	....	G	52	....	1	1	65	....	....
963..	S	..	....	....	....	....	..	Y	....	G	45	....	1	1	75	....	....
964..	O	..	....	....	....	....	..	....	....	F	52	....	1	1	25	....	....
965..	I	..	5	Y	A T	Y	..	Y	Y	G	52	....	2	1	1000	900	....
DUNN COUNTY.																	
966..	O	N	....	....	....	....	N	Y	....	F	30	....	4	1	119	....	....

DOWNSVILLE.

	Buildings.		Plant.		Hours per Week.		Employees.							Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
967..	5	.....	O	R	66	66	95	95	.....	95	.....	...	....	....	2	....	Y

DRUMMOND.

968..	7	.....	O	R	66	66	160	160	4	164	1	...	....	2	3	Y	Y

DUCK CREEK.

969..	1	.....	O	R	60	54	40	16	.....	16	....	....	....	....	....	....	....
970..	1	.....	O	..	60	60	154	85	.....	85	2	...	....	....	....	....	....
971..	1	.....	L	I	60	.....	25	.....	.....	.....	.....	...	....	....	....	....	....

DUNBAR.

972..	9	.....	O	R	60	60	150	150	.....	150	3	...	....	2	4	Y	Y

DUNDAS.

973..	3	.....	O	R	66	66	2	2	.....	2	.....	..	....	....	1	Y	Y
974..	5	.....	O	..	66	66	26	14	.....	14	2	...	....	....	1	..	..

DORCHESTER.

975..	1	.....	O	I	60	.....	30	5	.....	5	.....	...	....	....	2	Y	Y

EAU CLAIRE.

976.	4	.....	O	R	60	60	18	14	.....	14	....	....	....	2	1	Y	Y
977. P	2	.....	O	..	84	84	15	12	1	13	....	....	....	....	....	....	....
978. P	1	.....	O	..	60	60	30	7	23	30	....	....	....	....	....	....	....
979.	1	.....	O	..	60	60	50	40	.....	40	....	....	....	1	1	Y	Y
980. P	1	.....	L	..	60	60	11	9	2	11	1	....	....	1	1	..	..
981.	5	.....	O	..	60	60	180	180	.....	180	....	....	....	....	....	....	....
982.	4	.....	O	..	120	120	110	100	10	110	6	...	....	....	3	Y	Y
983.	1	.....	O	..	60	60	6	6	.....	6	....	....	....	....	....	....	....
984.	3	1	O	..	60	60	40	40	.....	40	3	...	....	2	2	Y	Y
985.	1	.....	O	..	60	60	12	5	.....	5	....	....	....	....	2	..	..
986.	4	1	O	..	60	60	5	4	.....	4	....	...	....	2	2	..	..
987. P	1	.....	L	..	60	60	16	7	2	9	....	...	....	....	2	..	..
988.	1	.....	O	I	60	....	16	....	.....	.....	....	....	....	....	....	....	....
989.	4	.....	O	R	84	84	18	18	.....	18	....	....	....	1	2	Y	Y
990.	2	.....	O	..	84	84	6	3	.....	3	....	....	....	....	....	....	....
991.	3	1	O	..	60	60	40	10	6	16	....	....	1	....	2	Y	Y
992.	8	.....	O	..	60	60	150	150	.....	150	1	...	....	2	3	..	..
993.	5	.....	O	..	60	60	25	20	.....	20	....	...	....	....	2	..	..
994.	6	.....	O	..	60	60	40	40	.....	40	1	...	....	1	1	..	..
995.	1	.....	L	..	60	60	6	5	1	6	1	...	....	2	1	..	..
996. P	1	.....	L	..	60	60	5	4	1	5	....	...	....	....	1	..	..
997.	4	.....	O	..	60	60	3	2	.....	2	....	...	....	....	2	....	..
998.	1	.....	L	..	60	60	36	27	9	36	2	...	....	2	1	Y	..
999.	3	.....	O	..	60	60	100	90	.....	90	38	2	....	....	....	..	..
1000.	2	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	....	....	....

DUNN COUNTY.

Running number	Doors.		Elevators				Machinery vats and pans guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
967..	S O	N	....	....	....	....	N	Y	....	G	119 d	....	1	1	....	1500	....

BAYFIELD COUNTY.

968..	S O	N	....	....	....	....	N	Y	....	....	50	....	8	3	575	....	....

BROWN COUNTY.

969..	....	....	....	....	....	....	....	....	....	....	24	....	3	....	....	....	....
970..	....	....	....	....	....	....	....	....	....	....	48	1	3	....	....	....	....
971..	....	....	....	....	....	....	....	....	....	....	22	....	1	1	....	....	....

MARINETTE COUNTY.

972..	S O	N	....	....	....	....	N	Y	....	G	25–40	....	8	3	200	....	....

CALUMET COUNTY.

973..	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	12	....	....
974..	O	..	....	....	....	....	Y	....	....	G	9 m	....	....	....	40	....	....

CLARK COUNTY.

975..	I	N	....	....	....	....	....	....	....	F	13	....	2	1	50	....	....

EAU CLAIRE COUNTY.

976.	I	N	....	....	....	....	Y	Y	....	G	52	....	....	....	....	....	....
977.	I	..	....	....	....	....	..	..	....	....	52	....	2	1	300	....	....
978.	....	....	....	....	....	....	..	..	Y	G	52	....	1	1	50	....	....
979.	I	N	1	Y	D	Y	..	..	....	G	52	....	....	....	....	....	5
980.	I	..	....	....	....	....	..	..	Y	G	52	....	....	....	....	....	5
981.	I	..	....	....	....	....	N	..	....	G	25	....	8	1	550	....	....
982.	S I	..	2	Y	A G	Y	Y	..	....	G	52	....	2	....	....	1000	....
983.	....	..	....	....	....	....	..	..	....	G	51	....	....	....	....	....	....
984.	S I	..	....	....	....	....	..	..	....	G	50	....	1	1	25	....	....
985.	I	..	....	....	....	....	..	..	....	G	40	....	....	....	....	....	....
986.	I	..	....	....	....	....	Y	Y	....	G	52	....	1	1	30	....	....
987.	I	..	1	Y	O	Y	..	..	Y	G	52	....	....	....	....	....	2
988.	I	..	....	....	....	....	..	..	....	G	42	....	2	1	125	....	....
989.	I	..	....	....	....	....	....	..	....	G	52	....	2	1	200	750	....
990.	I	..	....	....	....	....	Y	..	....	G	52	....	2	2	50	....	....
991.	I	..	1	Y	D	Y	..	..	Y	G	48	....	....	....	200	....	....
992.	I	....	....	....	....	....	..	..	....	G	17	....	10	3	950	....	....
993.	I	N	....	....	....	....	..	..	....	....	40	....	1	1	40	....	....
994.	I	..	....	....	....	....	..	..	....	G	22	....	6	1	250	....	....
995.	I	..	....	....	....	....	..	..	Y	G	52	....	....	....	....	....	....
996.	I	..	1	....	N	N	..	..	Y	G	....	....	....	....	....	....	10
997.	I	..	....	....	....	....	N	..	....	G	52	....	1	1	60	....	....
998.	I	..	....	....	....	....	Y	..	Y	G	52	....	....	....	....	....	5
999.	I	..	....	....	....	....	N	..	....	G	10	1	2	1	175	....	....
1000.	I	..	....	....	....	....	Y	..	....	G	10	....	1	1	20	....	....

EAU CLAIRE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
1001.	3	1	O	R	60	60	30	25	.....	25	.....	...	....	2	2	Y	Y
1002.	7	.....	O	..	60	60	75	50	.....	50	.....	...	....	....	2	....	..
1003.	5	.....	O	..	60	60	30	28	2	30	.....	...	....	....	2	Y	..
1004.	9	.....	O	..	60	60	175	175	.....	175	2	...	....	2	3	..	..
1005.	2	2	O	..	60	60	160	160	.....	160	26	...	....	2	4	..	..
1006.	7	1	O	..	60	60	115	65	.....	65	.....	...	....	3	1	..	..
1007.	P 1	.....	L	..	60	60	6	3	3	6	1	...	....	....	2	..	..
1008.	2	.....	O	..	60	60	25	10	.....	10	.....	...	....	1	1	..	..
1009.	8	.....	O	..	60	60	.....	.....	.....	.....	.....	...	....	....	....	....	....
1010.	7	.....	O	..	60	60	300	269	.....	269	6	...	....	1	3	Y	Y
1011.	7	.....	O	..	60	60	183	183	.....	183	3	1	....	....	4	..	..
1012.	4	1	O	..	60	60	11	11	.....	11	.....	...	....	1	5	....	....
1013.	P 1	.....	O	..	60	60	9	9	.....	9	2	...	....	....	....	....	....
1014.	8	.....	O	I	60	....	80	4	.....	4	8	...	....	1	3	Y	Y
EDGAR.																	
1015.	1	.....	O	I	66	....	35	.....	.....	.....	4	....	....	....	....	....	....
1016.	2	.....	O	R	66	66	60	60	.....	60	.....	....	....	1	1	Y	Y
1017.	1	.....	O	..	66	66	20	20	.....	20	2	....	....	....	....	....	....
1018.	1	.....	O	..	60	60	30	30	.....	30	2	....	....	....	....	....	....
EDGERTON.																	
1019.	.....	P 1	L	R	60	60	10	5	1	6	2	....	....	1	1	Y	Y
1020.	2	.....	O	..	60	....	25	20	.....	20	.....	....	....	....	....	....	....
1021.	2	.....	O	I	60	....	21	.....	.....	.....	.....	....	....	1	....	Y	Y
1022.	P 1	.....	O	R	60	60	5	3	.....	3	.....	....	....	....	....	....	....
ELAND JUNCTION.																	
1023.	2	.....	O	R	60	60	25	25	.....	25	.....	....	....	....	....	....	....
1024.	6	.....	O	..	60	60	30	30	.....	30	.....	....	....	2	1	Y	Y
1025.	4	.....	O	..	66	66	30	30	.....	30	.....	....	....	1	2	Y	Y
ELKHORN.																	
1026.	2	.....	O	R	60	60	5	2	.....	2	.....	....	....	....	1	Y	Y
1027.	.....	P 1	O	..	60	60	7	4	3	7	.....	....	....	....	....	....	....
1028.	2	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	1	Y	Y
1029.	1	.....	O	..	60	60	7	3	.....	3	.....	....	....	....	1	..	..
1030.	4	.....	O	..	60	60	10	8	.....	8	.....	....	....	1	1	..	..
1031.	1	1	O	..	60	60	20	12	.....	12	.....	....	....	....	1	Y	Y
1032.	2	.....	O	..	60	60	5	3	.....	3	.....	....	....	....	1	..	..
ELLIS JUNCTION.																	
1033.	4	.....	O	R	60	60	165	103	1	104	5	....	....	....	....	Y	Y

EAU CLAIRE COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1001.	I	N	.....	.....	....	.....	Y	Y	.....	....	45	....	1	1	20	....	....
1002.	I	..	.....	.....	....	.....	..	..	.....	....	52	....	1	1	150	40	....
1003.	I	..	1	Y	A G	Y	..	..	Y	G	40	....	2	1	200	....	....
1004.	I	..	1	..	A G	..	N	..	.....	G	33	....	7	4	450	....	....
1005.	S O	..	.....	.....	A D	..	Y	..	.....	G	40	....	2	1	150	....	....
1006.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	50	....	....
1007.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	....	....	....	....	....
1008.	I	..	.....	.....	....	.....	..	..	.....	G	40	....	1	1	50	....	....
1009.	I	..	.....	.....	....	.....	N	..	.....	G	32	....	2	1	60	....	....
1010.	I	..	.....	.....	....	.....	Y	..	.....	G	22	....	4	2	750	....	....
1011.	S O	..	.....	.....	....	.....	Y	..	.....	G	20	....	9	2	800	....	....
1012.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	2	30	....	....
1013.	I	..	.....	.....	....	.....	..	..	.....	....	52	....	....	....	....	....	....
1014.	I	..	2	Y	A G	Y	..	..	.....	G	25	....	3	2	125	....	....

MARATHON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1015.	I	N	.....	.....	.....	.....	Y	.....	.....	G	16	....	2	1	40	....	....
1016.	O I	..	.....	.....	.....	.....	N	.....	.....	.....	13	....	5	1	100	....	....
1017.	O	..	.....	.....	.....	.....	..	.....	.....	G	24	....	2	1	45	....	....
1018.	O I	..	.....	.....	.....	.....	..	.....	.....	G	32	....	1	1	40	....	....

ROCK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1019.	I	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1020.	.....	.....	.....	.....	.....	.....	Y	.....	.....	.....	20	....	1	1	35	....	....
1021.	I	N	.....	.....	.....	.....	..	.....	.....	G	I	....	1	1	50	....	....
1022.	I	..	.....	.....	.....	.....	..	Y	.....	G	52	....	....	1	2	....	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1023.	.....	N	.....	.....	.....	.....	N	.....	.....	G	52	....	4	2	30	....	....
1024.	O	..	.....	.....	.....	.....	..	.....	.....	G	40	....	2	2	200	....	15
1025.	O	..	.....	.....	.....	.....	.....	.....	.....	G	4	....	2	1	60	....	....

WALWORTH COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1026.	I	N	.....	.....	.....	.....	N	.....	.....	G	52	....	1	1	15	....	....
1027.	I	..	.....	.....	.....	.....	Y	Y	Y	G	52	....	....	1	4	....	....
1028.	.....	..	.....	.....	.....	.....	N	.....	.....	G	N	....	1	1	20	....	....
1029.	I	..	.....	.....	.....	.....	.....	.....	.....	G	26	....	....	....	....	....	....
1030.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	8	....	....
1031.	I	..	1	.....	.....	.....	.....	.....	.....	G	26	....	1	1	25	....	....
1032.	I	..	.....	.....	.....	.....	N	.....	.....	G	4	....	1	1	20	....	....

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1033.	O	N	.....	.....	.....	.....	.....	.....	.....	.....	12-32	....	4	3	....	....	....

ELMHURST.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1034.	1	....	O	I	66	....	35	....	....	....	....	....	....	....	1	Y	....
1035.	2	....	O	..	66	....	40	....	....	....	....	....	....	....	1	....	Y

ELMWOOD.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1036.	4	....	O	R	60	60	22	5	....	5	....	....	....	....	....	....	....
1037.	2	....	O	..	60	60	10	10	....	10	....	....	....	....	....	....	....

ELLSWORTH.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1038.	2	....	O	R	60	60	18	18	....	18	3	1	....	1	1	....	Y

EMBARRASS.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1039.	2	....	O	R	60	60	25	20	....	20	2	....	....	....	1	N	N
1040.	1	....	O	..	60	60	2	2	....	2	....	....	....	....	1	Y	Y

EVANSVILLE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1040.	10	....	O	R	60	60	55	55	....	55	....	....	....	1	2	Y	Y
1042.	1	....	O	..	60	60	7	4	....	4	....	....	....	1	1	Y	Y

EAGLE RIVER.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1043.	....	....	O	....	60	60	100	15	....	15	....	....	....	....	....	....	....

EAGLE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1044.	....	....	O	I	60	....	12	4	....	4	....	....	....	....	....	....	....

ELCHO.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1045.	....	1	O	R	60	60	35	32	....	32	2	1	....	....	....	....	Y

FAIRCHILD.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1046.	18	....	O	R	63	53	200	158	....	158	....	....	....	1	2	Y	Y

FARM HILL.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1047.	3	....	O	I	....	....	15	10	....	10	....	....	....	....	....	....	....

FENWOOD.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails
1048.	2	....	O	I	66	....	25	....	....	....	....	....	....	....	1	Y	N
1049.	5	....	O	R	66	53	15	10.	....	10	....	....	....	....	....	....	....

SHAWANO COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1034.	I	N	.....	.....	.....	.....	Y	.....	.....	G	12	....	1	1	45	....	....
1035.	I	..	.....	.....	.....	.....	..	.....	.....	G	25	....	3	2	80	....	....
PIERCE COUNTY.																	
1036.	.....	N	.....	.....	.....	.....	N	Y	.....	G	30	....	2	2	65	....	....
1037.	.....	..	.....	.....	.....	.....	..	..	.....	F	.....	1	1	1	40	....	....
PIERCE COUNTY.																	
1038.	O	N	.....	.....	.....	.....	Y	Y	....	F	40	....	1	1	30	....	....
WAUPACA COUNTY.																	
1039.	S	N	.....	.....	.....	.....	Y	.....	.....	G	35	....	....	....	....	90	....
1040.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	10	....	....
ROCK COUNTY.																	
1041.	.....	N	1	Y	D	Y	.....	Y	.....	G	41	....	2	2	130	....	....
1042.	N	N	.....	.....	.....	.....	Y	..	.....	G	52	....	....	....	....	....	....
VILAS COUNTY.																	
1043.	.....	.....	.....	.....	.....	.....	Y	Y	.....	.....	6	....	....	....	....	....	....
VILAS COUNTY.																	
1044.	.....	.....	.....	.....	.....	.....	Y	Y	.....	.....	35	....	1	1	40	....	....
LANGLADGE COUNTY.																	
1045.	O	N	.....	.....	.....	.....	N	Y	.....	G	24	....	3	1	300	....	....
CLARK COUNTY.																	
1046.	N	N	.....	.....	.....	.....	N	Y	.....	G	34	....	7	6	350	....	....
PIERCE COUNTY.																	
1047.	.....	N	.....	.....	.....	.....	N	Y	.....	.....	14	....	1	1	25	....	....
MARATHON COUNTY.																	
1048.	O	N	.....	.....	.....	.....	Y	.....	.....	G	20	....	5	1	90	....	....
1049.	S	N	.....	.....	.....	.....	N	.....	.....	G	24	....	2	1	60	....	....

FOND DU LAC.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1050.	1	.....	O	R	60	60	12	12	.....	12	....	....	....	....	1	Y	Y
1051.	1	.....	O	..	54	54	8	6	.....	6	....	....	....	....	2	..	..
1052.	3	.....	O	..	60	60	100	85	.....	85	....	....	....	2	2	..	..
1053.	4	.....	O	..	60	60	8	8	.....	8	....	....	....	1	1	..	..
1054.	P 1	.....	L	..	48	48	25	8	3	11	....	....	....	....	1	..	..
1055.	.....	P 1	L	..	60	60	19	13	6	19	6	....	....	1	1	..	..
1056.	P 1	.....	L	I	60	....	8	1	.....	1	....	....	....	....	1	..	..
1057.	.....	P 1	L	R	60	60	9	3	6	9	....	....	....	....	1	..	..
1058.	1	.....	O	..	98	98	10	10	.....	10	....	....	....	....	....	....	....
1059.	3	.....	O	..	60	60	35	23	.....	23	....	....	....	....	1	Y	Y
1060.	1	1	O	..	168	168	13	13	.....	13	....	....	4	2	2	..	..
1061.	1	.....	L	..	60	60	19	2	17	19	....	....	....	....	1	..	..
1062.	.....	P 1	L	..	60	60	10	3	5	8	....	....	....	....	1	..	..
1063.	4	.....	O	..	60	60	40	40	.....	40	6	....	....	1	1	..	..
1064.	.....	P 1	L	..	57	57	12	12	.....	12	1	....	....	2	1	..	..
1065.	3	.....	O	..	60	60	6	5	1	6	....	....	....	....	....	....	....
1066.	6	.....	O	..	60	60	60	45	.....	45	....	....	....	....	1	Y	Y
1067.	1	.....	L	..	60	60	17	15	2	17	....	....	....	1	1	..	..
1068.	1	1	O	..	60	60	144	144	.....	144	30	....	1	....	2	..	..
1069.	.....	P 1	O	..	90	90	15	8	7	15	2	....	....	....	2	..	..
1070.	2	.....	O	..	60	60	15	9	.....	9	....	....	....	....	2	..	..
1071.	3	.....	O	..	60	60	24	16	4	20	2	....	....	....	1	..	..
1072.	P 1	.....	L	..	54	54	8	1	6	7	1	....	....	....	1	..	..
1073.	.....	P 1	O	..	60	60	20	14	6	20	....	....	....	....	1	..	..
1074.	3	.....	O	..	60	60	8	7	1	8	....	....	....	1	1	..	..
1075.	6	.....	O	..	48	48	39	20	.....	20	....	....	....	1	1	..	..
1076.	P 1	.....	L	..	60	60	10	4	5	9	2	....	....	1	1	..	..
1077.	1	2	O	..	60	48	175	150	.....	150	7	....	1	3	6	..	..
1078.	2	1	O	..	60	60	60	20	.....	20	....	....	1	....	2	..	..
1079.	1	1	L	I	60	....	.....	.....	.....	.....	....	....	....	....	....	....	....
1080.	7	.....	O	R	60	32	50	26	.....	26	....	....	....	1	2	Y	Y
1081.	1	.....	O	..	60	60	45	41	4	45	6	....	....	....	1	..	..
1082.	1	.....	O	..	60	60	16	8	5	13	2	....	....	....	1	..	..
1083.	.....	2	O	..	54	54	53	34	19	53	....	....	1	....	4	..	..
1084.	2	2	O	..	60	60	225	225	.....	225	....	....	4	2	1	..	..

FORT ATKINSON.

1085.	11	1	O	R	60	60	87	87	.....	87	12	....	....	....	5	Y	Y
1086.	1	.....	O	..	66	66	20	18	.....	18	3	....	....	....	....	....	....
1087.	P 1	.....	L	..	60	60	4	1	3	4	....	....	....	....	....	....	....
1088.	5	.....	O	..	60	60	7	7	.....	7	2	....	....	....	2	Y	Y
1089.	11	4	O	..	60	60	225	198	16	214	26	....	1	3	9	..	..
1090.	3	.....	O	..	60	60	8	5	.....	5	....	....	....	1	1	..	..
1091.	5	.....	O	..	60	60	15	10	.....	10	....	....	....	....	2	..	..
1092.	1	.....	L	..	60	54	24	16	.....	16	4	....	....	....	1	..	..
1093.	3	1	O	..	60	60	6	5	.....	5	....	....	....	....	1	..	..

FOND DU LAC COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1050.	I	N	.....	.....	.....	.....	Y	Y	.....	G	47	....	2	1	75	....	....
1051.	I	..	.....	.....	.....	.....	..	.....	.....	G	49	....	1	1	25	....	....
1052.	I	..	1	Y	D	Y	..	Y	.....	G	39	....	2	2	150	....	....
1053.	I	..	1	Y	D	..	..	..	.....	G	50	....	1	1	35	....	....
1054.	O	..	.....	.....	.....	.....	..	..	Y	G	50	....	....	....	....	....	....
1055.	O	..	.....	.....	.....	.....	..	..	..	G	52	....	1	1	....	....	G25
1056.	O	..	.....	.....	.....	.....	..	..	..	G	25	....	....	....	....	....	....
1057.	O	..	.....	.....	.....	.....	..	..	..	G	52	....	1	1	10	....	....
1058.	O	..	.....	.....	.....	.....	.....	..	.....	G	52	....	3	3	300	....	....
1059.	I	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	40	....	....
1060.	O	..	.....	.....	.....	.....	..	..	.....	G	40	....	1	1	50	....	....
1061.	O	..	.....	.....	.....	.....	..	..	Y	G	49	....	....	1	....	....	4
1062.	O	..	.....	.....	.....	.....	..	..	..	G	52	....	1	1	17	....	....
1063.	O	..	1	Y	N	Y	..	..	.....	G	40	....	2	1	75	....	....
1064.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	1	....	....	1½
1065.	.....	.....	.....	.....	.....	.....	.....	..	Y	G	52	....	2	1	80	....	....
1066.	Y	N	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	50	....	....
1067.	N	..	.....	.....	.....	.....	..	..	Y	G	52	....	....	....	....	....	....
1068.	O	..	1	Y	T	Y	..	..	.....	G	39	....	2	2	300	....	....
1069.	Y	..	1	..	D	..	..	..	Y	G	52	....	....	....	....	....	....
1070.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1071.	O	..	1	Y	D	Y	..	..	Y	G	48	....	1	1	75	....	....
1072.	O	..			.....	.....	.....	..	..	G	52	....	....	....	....	....	....
1073.	O	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	1	....	....	15
1074.	Y	..	.....	.....	.....	.....	..	Y	Y	G	52	....	....	....	....	....	....
1075.	I	N	1	Y	D	Y	..	..	.....	G	48	....	1	1	150	....	....
1076.	I	..	.....	.....	.....	.....	..	..	Y	G	52	....	....	1	....	....	4
1077.	O	..	3	Y	D	Y	..	..	.....	G	52	....	2	2	200	....	....
1078.	O	..	1	..	D	..	..	..	.....	G	36	....	2	2	100	....	....
1079.	.....	.....	1	..	B	..	..	..	.....	G	.....	....	1	1	....	....	20
1080.	I	N	.....	.....	.....	.....	..	..	.....	G	51	....	1	1	60	....	....
1081.	I	..	.....	.....	.....	.....	..	..	Y	G	40	....	....	....	....	....	....
1082.	I	..	.....	.....	.....	.....	..	..	..	.....	45	....	....	....	....	....	....
1083.	I	..	1	Y	D	Y	.....	..	..	G	52	....	1	1	50	....	....
1084.	I	..	1	..	D	..	Y	..	.....	F	37½	....	4	2	300	....	....

JEFFERSON COUNTY.

1085.	I	N	3	Y	B	Y	Y	.....	.....	G	52	..	1	2	143	....	....
1086.	.....	.....	.....	.....	.....	.....	..	.....	.....	.....	21	....	1	1	25	....	....
1087.	I	N	.....	.....	.....	.....	..	Y	.....	G	52	....	1	1	6	....	....
1088.	O	..	.....	.....	.....	.....	..	.....	.....	G	52	....	2	1	15	....	....
1089.	I	..	2	Y	D	Y	..	Y	Y	G	52	....	2	2	125	....	....
1090.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	18	....	....
1091.	S	.....	.....	.....	.....	.....	..	.....	.....	G	52	....	2	2	35	....	....
1092.	I	N	1	Y	B	Y	..	.....	.....	G	26	....	1	1	12	....	....
1093.	I	..	.....	.....	.....	.....	..	.....	.....	G	25	....	1	1	25	....	....

FOSSFUR.

Running number.	Buildings.		Plant.		Hours per Week.		Employees							Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1094.	1	.....	O	I	60	....	60	.....	.....	....	.....	....	....	....	....	....	....

FOUNTAIN CITY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1095.	2	1	O	R	72	72	5	5	.....	5	....	....	....	1	2	Y	Y
1096.	1	.....	O	..	60	60	2	1	.....	1	....	....	....	....	2	....	..
1097.	2	.....	O	..	60	60	4	4	.....	4	....	....	....	....	....	....	....
1098.	1	1	O	..	60	60	6	6	.....	6	....	....	....	....	1	Y	Y
1099.	3	.....	O	..	60	60	5	4	.....	4	....	....	....	....	1	..	..
1100.	1	.....	O	..	60	60	5	5	.....	5		....	....	....	....	....	....

GREEN BAY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1101.	1	.....	O	R	60	60	55	3	2	5	....	....	....	....	....	....	....
1102.	2	.....	O	..	60	60	10	7	.....	7	3	....	....	1	1	Y	Y
1103.	1	1	O	..	60	60	60	12	24	36	11	....	1	....	3	..	..
1104.	14	.....	O	..	60	60	90	75	.....	75	4	....	....	3	1	..	..
1105.	2	.....	O	..	60	60	15	10	.....	10	....	....	....	....	....	....	....
1106.	2	.....	O	I	60	.....	6	.....	.....	.....	....	....	....	....	1	..	..
1107.	3	.....	O	R	60	60	12	12	.....	12	....	....	1	....	1	..	..
1108.	2	.....	O	..	60	60	6	1	.....	1	....	....	....	....	....	....	....
1109.	9	.....	O	..	60	60	125	125	.....	125	....	....	....	....	1	Y	Y
1110.	4	1	O	..	144	144	125	125	.....	125	2	....	....	1	1	..	..
1111.	4	.....	L	..	60	60	60	32	.....	32	....	....	....	....	....	....	....
1112.	1	.....	O	..	60	60	5	4	.....	4	2	....	....	....	1	Y	Y
1113.	5	.....	O	..	60	60	29	29	.....	29	4	....	....	....	2	..	..
1114.	2	.....	O	..	60	60	42	42	.....	42	....	....	....	....	1	..	..
1115.	3	1	O	..	66	66	20	20	.....	20	....	....	2	1	2	..	..
1116.	P 1	.....	L	..	60	60	5	2	.....	2	1	....	....	....	....	....	....
1117.	3	.....	O	..	66	66	13	13	.....	13	....	....	....	....	....	....	....
1118.	4	.....	O	..	66	66	.....	9	.....	9	....	....	....	....	....	....	....
1119.	1	.....	O	..	60	60	5	2	.....	2	....	....	....	....	....	....	....
1120.	P 1	.....	O	..	60	60	18	15	3	18	....	....	....	....	1	Y	Y
1121.	3	.....	O	..	60	60	22	15	.....	15	....	....	....	1	2	..	..
1122.	.....	1	O	..	60	60	35	30	5	35	....	....	1	....	2	..	..
1123.	7	.....	O	..	84	84	16	16	.....	16	....	....	....	....	1	..	..
1124.	4	1	O	..	60	60	45	27	.....	27	....	....	....	....	2	..	..
1125.	P 1	.....	L	..	60	60	15	8	3	11	....	....	....	....	1	..	..
1126.	1	.....	O	..	72	72	2	2	.....	2	....	....	....	....	....	....	....
1127.	5	.....	O	..	60	60	65	60	.....	60	....	....	....	....	....	....	....
1128.	3	3	O	..	60	60	20	20	.....	20	....	....	....	....	3	Y	Y
1129.	P 1	.....	O	..	60	60	5	3	.....	3	....	....	....	....	....	....	....
1130.	1	.....	O	..	60	60	5	3	.....	3	2	....	....	....	....	....	....
1131.	P 1	.....	L	..	60	60	5	1	.....	1	....	....	....	....	1	Y	Y
1132.	2	1	O	..	144	144	.....	11	.....	11	....	....	....	1	1	..	..
1133.	3	.....	O	..	144	144	30	23	7	30	1	....	....	....	....	....	....
1134.	1	.....	O	I	66	.....	15	.....	.....	.....	....	....	....	....	....	....	....
1135.	1	.....	O	R	60	60	20	16	.....	16	2	....	....	....	....	....	....

LINCOLN COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1094.	....	....	....	....	....	....	....	....	....	....	20	....	1	1	60	....	....

BUFFALO COUNTY.

1095.	N	N	....	....	....	....	N	Y	....	G	40	....	1	1	60	....	....
1096.	Y	..	....	....	....	....	Y	..	....	G	52	....	....	1	....	....	15
1097.	....	..	....	....	....	....	....	Y	....	G	52	....	1	1	10	....	....
1098.	O	..	....	....	....	....	Y	..	....	G	52	....	1	1	25	....	....
1099.	N	..	....	....	....	....	..	..	....	G	52	....	1	1	12	....	....
1100.	N	..	....	....	....	....	..	..	....	G	50	....	....	....	....	....	....

BROWN COUNTY.

1101.	S	N	....	....	....	....	....	....	....	F	52	....	1	....	....	....	....
1102.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
1103.	I	..	1	Y	G	Y	Y	Y	Y	G	52	....	1	1	50	....	....
1104.	O	..	....	....	....	....	..	..	....	G	52	....	2	1	80	....	....
1105.	S	..	....	....	....	....	..	....	....	G	52	....	1	1	10	....	....
1106.	I	..	....	....	....	....	....	....	....	....	I	....	1	1	40	....	....
1107.	S	..	1	Y	B	Y	Y	....	....	G	30	....	2	2	250	....	....
1108.	O	..	....	....	....	....	..	....	....	G	....	....	1	1	10	....	....
1109.	O	..	....	....	....	....	..	Y	....	G	52	....	2	1	100	....	....
1110.	S	..	....	....	....	....	..	....	....	G	....	....	5	1	300	....	....
1111.	S	..	....	....	....	....	..	....	....	G	....	....	6	1	200	....	....
1112.	O	..	....	....	....	....	..	....	....	G	52	....	1	1	50	....	....
1113.	S	..	....	....	....	....	....	....	....	....	52	....	1	1	35	....	....
1114.	S	..	....	....	....	....	Y	....	....	G	15	....	2	1	325	....	....
1115.	I	..	....	....	....	....	..	....	....	G	52	....	2	1	200	....	....
1116.	I	..	....	....	....	....	..	....	....	G	52	....	1	3	....	....	....
1117.	I	N	....	....	....	....	..	....	....	....	26	....	1	1	85	....	....
1118.	S	..	....	....	....	....	..	....	....	G	52	....	3	2	300	....	....
1119.	I	....	....	....	....	....	..	....	....	G	52	....	1	2	75	....	....
1120.	I	N	....	....	....	....	..	....	....	G	52	....	1	1	15	....	3
1121.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
1122.	I	..	1	Y	S	Y	Y	Y	Y	G	52	....	....	1	10	....	....
1123.	I	..	....	....	....	....	..	..	....	F	52	....	4	2	750	....	....
1124.	I	..	....	....	....	....	..	Y	Y	G	17	....	1	1	90	....	....
1125.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	10	....	....
1126.	I	..	....	....	....	....	..	....	....	G	52	....	4	3	....	....	....
1127.	O	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
1128.	I	..	....	....	....	....	..	Y	....	G	52	....	2	1	48	....	....
1129.	....	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
1130.	I	..	....	....	....	....	....	....	....	G	52	....	1	1	7	....	....
1131.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
1132.	O	..	....	....	....	....	Y	Y	....	G	52	....	1	1	150	....	....
1133.	....	..	....	....	....	....	..	..	Y	G	45	....	2	1	125	....	....
1134.	....	....	....	....	....	....	..	....	....	....	....	....	1	1	30	....	....
1135.	....	....	....	....	....	....	..	....	....	....	16	....	1	1	30	....	....

GREEN BAY.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1136.	3	.....	O	R	60	60	12	12	.....	12	.....	....	....	....	2	Y	Y
1137.	3	.....	O	..	60	60	15	8	.....	8	.....	...	....	....	....	....	....
1138.	1	.....	O	..	60	60	25	5	.....	5	.....	....	....	....	....	....	....
1139.	P 1	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	1	Y	Y
1140.	4	2	O	..	60	60	115	115	.....	115	10	....	....	2	2	..	..
1141.	P 3	.....	O	..	60	60	140	100	40	140	20	....	....	....	1	..	..
1142.	2	.....	O	..	60	60	8	4	.....	4	.....	....	....	....	1	..	..
1143.	2	.....	O	I	66	66	65	65	.....	65	.....	....	....	....	1	..	..
1144.	2	.....	O	R	60	60	20	12	.....	12	.....	....	....	....	1	Y	Y
1145.	3	.....	L	..	60	60	40	5	.....	5	.....	....	....	....	2	..	..
1146.	3	.....	O	..	60	60	19	19	.....	19	.....	....	....	....	1	..	..
1147.	P 7	P 1	O	..	60	60	115	115	.....	115	10	...	....	....	2	..	..
1148.	5	.....	O	..	60	60	40	40	.....	40	.....	....	....	....	....	....	....
1149.	1	.....	O	..	60	48	8	4	.....	4	.....	....	....	....	....	....	....
1150.	.....	2	O	..	60	60	16	16	.....	16	.....	....	....	....	3	Y	Y
1151.	P 1	.....	L	..	60	60	5	2	1	3	.....	....	....	....	1	Y	Y
1152.	1	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	....	....	....
1153.	1	.....	O	I	60	....	6	.....	.....	.....	.....	....	....	....	1	Y	Y
1154.	P 1	.....	O	R	60	60	5	3	.....	3	.....	....	....	....	....	....	....
1155.	2	.....	O	..	60	60	5	4	.....	4	.....	....	....	....	....	....	....
1156.	2	.....	O	I	60	....	18	.....	.....	.....	.....	....	....	....	....	....	....
1157.	2	2	O	..	60	....	25	.....	.....	.....	.....	....	....	....	2	Y	Y
1158.	P 1	.....	L	R	.....	....	5	2	.....	2	.....	....	....	....	....	....	....
1159.	P 1	.....	L	R	60	60	5	5	.....	5	3	....	....	....	....	....	....
1160.	6	.....	O	..	60	60	12	12	.....	12	.....	....	....	1	2	Y	Y

GILE.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1161.	4	.....	O	R	60	60	240	200	.....	200	15	4	....	1	2	....	....

GILMAN.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1162.	2	.....	O	R	60	60	6	6	.....	6	.....	...	....	....	....	....	....
1163.	2	.....	O	..	60	60	8	3	.....	3	.....	...	....	....	....	....	....

GLEN FLORA.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1164.	5	.....	O	I	60	.....	46	1	.....	1	.....	....	....	1	....	....	....

GLENWOOD.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1165.	20	1	O	R	60	60	225	220	.....	220	20	3	....	4	8	....	....
1166.	1	.....	O	..	60	60	3	2	1	3	.....	...	....	....	....	....	....

GRAFTON.

Running number.	Buildings. 1 to 2 stories.	Buildings. 3 or more stories.	Plant. Owned or leased.	Plant. Running or idle.	Hours per Week. When running full time.	Hours per Week. Date of inspection.	Employees. Full capacity.	Employees. Date of Inspection. Male.	Employees. Date of Inspection. Female.	Employees. Date of Inspection. Total.	Employees. Date of Inspection. Between 14 and 18 years.	Employees. Date of Inspection. Under 14 years.	Number of fire escapes.	Stairways. Outside.	Stairways. Inside.	Stairways. Openings guarded.	Stairways. Have hand rails.
1167.	.....	1	O	R	72	72	5	3	.....	3	.....	...	....	....	1	....	....
1168.	1	1	O	R	60	60	39	39	.....	39	.....	...	....	....	3	....	....

BROWN COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pans guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1136.	I	N	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	18	....	....
1137.	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	15	....	....
1138.	I	..	.....	.....	.....	.....	.....	.....	.....	.....	52	....	....	....	....	....	....
1139.	I	..	.....	.....	.....	.....	Y	.....	.....	G	.....	....	1	1	46	....	....
1140.	S	..	2	Y	T	Y	..	.....	.....	G	45	....	1	1	90	....	....
1141.	S	..	1	Y	G	..	..	Y	Y	G	45	....	1	1	65	....	....
1142.	I	..	.....	.....	.....	.....	.....	.....	.....	.....	52	....	....	....	....	....	....
1143.	I	..	.....	.....	.....	.....	Y	.....	.....	G	45	....	2	1	100	....	....
1144.	I	..	.....	.....	.....	.....	..	.....	.....	G	45	....	1	1	50	....	....
1145.	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	50	....	....
1146.	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	45	....	....
1147.	S	..	.....	.....	.....	.....	..	Y	.....	G	35	....	6	2	425	....	....
1148.	I	..	.....	.....	.....	.....	..	.....	.....	G	50	....	1	1	150	....	....
1149.	S	..	.....	.....	.....	.....	..	.....	.....	G	26	....	1	1	15	....	....
1150.	I	..	1	Y	B	Y	..	Y	.....	G	52	...	1	1	40	....	....
1151.	I	..	.....	.....	.....	.....	.....	Y	.....	G	52	....	....	....	....	....	....
1152.	.....	.....	.....	.....	.....	.....	Y	.....	.....	F	52	....	....	1	4½	....	....
1153.	I	N	1	Y	B	Y	..	.....	.....	G	17	....	1	1	12	....	....
1154.	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1155.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	1	11	....	....
1156.	.....	.....	.....	.....	.....	.....	Y	.....	.....	...	21	....	1	1	18	....	....
1157.	I	N	2	Y	D	Y	..	.....	.....	G	42	....	1	1	50	....	....
1158.	I	..	.....	.....	.....	.....	..	Y	.....	G	52	....	1	1	4	....	....
1159.	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1160.	O	..	.....	.....	.....	.....	Y	Y	.....	G	52	....	1	1	25	....	....

IRON COUNTY.

1161.	O	N	.....	.....	.....	.....	Y	Y	.....	G	33	....	8	3	350	....	....

PIERCE COUNTY.

1162.	.....	N	.....	.....	.....	.....	N	.....	.....	F	14	....	1	1	30	....	....
1163.	.....	..	.....	.....	.....	.....	Y	Y	.....	F	20	1	1	1	40	....	....

CHIPPEWA COUNTY.

1164.	I	N	.....	.....	.....	.....	N	Y	.....	....	23	....	2	2	100	....	....

ST. CROIX COUNTY.

1165.	O	N	1	Y	G	Y	.....	Y	.....	G	45	....	14	9	481	....	....
1166.	.....	..	.....	.....	.....	.....	Y	..	.....	G	52	....	....	....	....	....	....

OZAUKEE COUNTY.

1167.	I	N	.....	.....	.....	.....	Y	Y	.....	G	52	....	....	....	....	84	....
1168.	I	..	2	Y	D	Y	..	.....	.....	....	52	....	1	....	....	75	....

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
GRATOIT.																	
1169.	2	.....	O	R	60	60	3	2	.....	2	.....	...	....	....	1	....	....
GREENWOOD.																	
1170.	2	.....	O	R	60	60	9	5	.....	5	.....	...	....	....	....	....	....
HARTFORD.																	
1171.	3	.....	O	R	60	60	15	3	2	5	.....	...	....	....	1	Y	Y
1172.	5	.....	O	..	60	60	20	13	.....	13	.....	...	....	....	1	..	..
1173.	2	.....	O	..	60	48	6	3	.....	3	.....	...	....	....	2	..	..
1174.	2	2	O	I	60	.....	5	5	.....	5	.....	...	....	....	1	..	..
1175.	7	.....	L	R	60	60	.....	12	.....	12	2	...	....	....	3	..	..
1176.	2	3	O	..	60	60	6	6	.....	6	.....	...	....	....	3	..	..
1177.	4	1	O	..	60	60	.....	3	.....	3	.....	...	....	....	1	..	..
1178.	5	.....	O	..	60	60	45	32	13	45	6	...	....	2	....	Y	..
HATCHVILLE.																	
1179.	2	.....	O	R	60	60	20	15	.....	15	.....	...	....	....	1	....	..
HAWTHORNE.																	
1180.	7	.....	.....	I	60	.....	70	16	.....	16	.....	...	....	2	....	..	..
HAYWARD.																	
1181.	1	.....	O	R	144	144	3	3	.....	3	.....	...	....	....	....	....	....
1182.	2	1	O	..	60	60	5	3	.....	3	.....	...	....	....	1	Y	Y
1183.	11	.....	O	..	66	66	250	210	.....	210	1	...	....	2	4	..	..
HAZELHURST.																	
1184.	4	.....	O	R	120	120	270	268	.....	268	5	...	....	....	1	Y	Y
HOULTON.																	
1185.	7	.....	O	R	60	60	144	144	.....	144	5	2	....	4	....	Y	Y
HORICON.																	
1186.	2	.....	O	R	60	60	175	155	1	156	4	....	....	1	2	Y	Y
HORNERSVILLE.																	
1187.	2	.....	O	R	60	63	22	22	.....	22	.....	....	....	1	....	Y	Y

GREEN COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1169.	I	N	....	....	....	....	Y	....	....	G	26	....	....	....	....	20	....

CLARK COUNTY.

1170.	....	N	....	....	....	....	N	Y	....	G	30	....	1	1	50	....	....

WASHINGTON COUNTY.

1171.	I	N	....	....	....	....	Y	Y	....	G	52	....	1	1	10	....	....
1172.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	85	....	....
1173.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	80	75	....
1174.	I	..	....	....	....	....	..	....	....	G	50	....	1	1	25	....	....
1175.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	50	....	....
1176.	I	..	....	....	....	....	..	....	....	G	42	....	2	1	20	....	....
1177.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	40	....	....
1178.	I	..	....	....	....	....	..	Y	Y	F	52	....	1	1	75	....	2½

DUNN COUNTY.

1179.	S	N	....	....	....	....	N	Y	....	F	30	1	1	1	30	....	....

DOUGLAS COUNTY.

1180.	O	N	....	....	....	....	N	Y	....	G	19	....	3	4	185	....	....

SAWYER COUNTY.

1181.	....	N	....	....	....	....	Y	Y	....	....	52	....	2	1	1500	....	....
1182.	S	..	....	....	....	....	..	..	....	G	50	....	1	1	25	....	....
1183.	S	..	....	....	....	....	N	..	....	G	35	....	8	3	1500	....	....

ONEIDA COUNTY.

1184.	O	....	....	....	....	....	Y	....	....	G	52	....	4	2	325	....	....

ST. CROIX COUNTY.

1185.	N	N	....	....	....	....	Y	Y	....	G	60	....	7	2	700	....	....

DODGE COUNTY.

1186.	I	N	1	Y	B	Y	Y	Y	....	G	27	....	2	2	100	....	....

BAYFIELD COUNTY.

1187.	....	....	....	....	....	....	Y	Y	....	G	....	....	1	2	80	....	....

HORTONVILLE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
1188.	3	.....	O	R	60	60	.....	3	.....	3	.....	...	....	....	1	Y	Y
1189.	2	.....	O	..	60	60	10	6	.....	6	.....	...	....	....	1	..	..
1190.	3	.....	O	I	60	60	35	20	.....	20	.....	...	....	....	1	..	..
1191.	1	1	O	R	60	60	5	5	.....	5	.....	...	....	....	1	..	..

HATLEY.

1192.	2	.....	O	I	66	66	25	25	.....	25	.....	...	....	....	1	Y	Y

HOUGHTON.

1193.	4	.....	O	R	60	60	40	15	.....	15	.....	...	....	....	....	....	....
1194.	11	.....	O	R	60	60	200	15	.....	15	.....	...	....	1	2	Y	Y

HUDSON.

1195.	9	.....	O	R	60	59	270	236	.....	236	.....	...	....	....	....	....	....
1196.	1	.....	O	..	60	60	5	4	.....	4	1	...	....	....	....	....	....
1197.	P 1	.....	L	..	60	60	5	3	2	5	1	...	....	....	....	....	....
1198.	8	.....	O	..	66	66	115	103	.....	103	2	...	....	....	1	....	Y
1199.	P 1	.....	O	..	60	60	5	5	.....	5	1	...	....	....	....	....	....
1200.	.....	.....	O	I	60	.....	13	.....	.....	.....	5	...	....	1	2	Y	Y

HUNTING.

1201.	1	.....	O	R	60	60	18	14	.....	14	.....	...	....	....	1	Y	....

HURLEY.

1202.	1	.....	O	R	60	60	25	4	.....	4	.....	...	....	....	....	....	....
1203.	P 1	.....	L	..	60	60	2	1	1	2	.....	...	....	....	....	....	....
1204.	1	.....	L	..	60	60	2	1	1	2	.....	...	....	....	....	....	....

HEWITT.

1205.	7	.....	O	R	60	60	20	18	.....	18	.....	...	....	....	....	....	....

HERBSTER.

1206.	3	.....	O	R	60	60	400	300	.....	300	.....	...	....	....	....	....	....

INDEPENDENCE.

1207.	4	.....	O	R	60	60	2	1	.....	1	.....	...	....	....	2	Y	Y
1208.	1	.....	O	..	60	60	2	2	.....	2	.....	...	....	1	1	..	..
1209.	.....	1	O	..	60	60	3	3	.....	3	.....	...	....	....	2	..	..
1210.	1	.....	O	..	60	60	2	1	1	2	.....	...	....	....	....	....	....

OUTAGAMIE COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1188.	O	N	....	....	....	....	Y	....	....	G	....	....	1	1	35	....	....
1189.	S	..	....	....	....	....	..	....	....	G	45	....	1	1	35	....	....
1190.	O	..	....	....	....	....	..	....	....	G	10	....	1	1	45	....	....
1191.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	64	....	....

MARATHON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1192.	S	N	....	....	....	....	....	....	....	G	8	....	1	1	45	....	..

BAYFIELD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1193.	O	N	....	....	....	....	Y	Y	....	G	32	....	3	3	300	....	....
1194.	O	..	....	....	....	....	..	..	....	G	15	....	6	6	150	....	....

ST. CROIX COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1195.	....	N	....	....	....	....	Y	Y	....	G	52	....	4	1	260	....	....
1196.	I	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
1197.	....	..	....	....	....	....	Y	..	Y	G	....	....	1	1	7	....	....
1198.	....	..	....	....	....	....	..	....	....	G	14	....	6	2	290	....	....
1199.	....	..	....	....	....	....	..	Y	....	G	52	....	....	....	....	....	....
1200.	S	..	1	Y	....	N	N	..	....	G	5	....	2	1	75	....	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1201.	I	N	....	....	....	....	Y	....	....	G	30	....	1	1	40	....	....

IRON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1202.	Y	N	....	....	....	....	Y	Y	....	G	52	....	....	....	....	....	....
1203.	Y	..	....	....	....	....	..	..	Y	....	52	....	....	....	....	....	....
1204.	Y	..	....	....	....	....	..	..	..	G	52	....	....	....	....	5	....

WOOD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1205.	O	N	....	....	....	....	....	Y	....	G	48	....	2	1	100	....	....

BAYFIELD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1206.	O	....	....	....	....	....	....	....	....	G	40	....	....	....	..	....	....

BUFFALO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1207.	O	N	....	....	....	....	Y	....	....	....	52	....	....	....	....	....	....
1208.	..	..	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....
1209.	I	....	....	....	....	....	....	....	....	....	45	....	....	....	....	40	....
1210.	I	....	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....

INGRAM.

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES						Number of fire escapes.	STAIRWAYS.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection. Male	Female	Total	Between 14 and 18 years.	Under 14 years.		Outside	Inside	Openings guarded.	Have hand rails.
1211.	4	.....	O	I	60	60	10	.....	.....	.....	.....	....	....	....	....	....	....

IRON RIVER.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside	Inside	Openings guarded.	Have hand rails.
1212.	1	.....	O	R	60	60	3	2	1	3	.....	....	....	....	....	....	....
1213.	7	.....	O	..	60	60	105	105	.....	105	.....	....	....	2	1	Y	Y
1214.	5	.....	O	..	60	60	100	60	.....	60	.....	....	....	2	1	..	..

IRVINGTON.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside	Inside	Openings guarded.	Have hand rails.
1215.	5	.....	O	R	60	60	130	130	.....	130	35	18	....	1	3	Y	Y

JANESVILLE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside	Inside	Openings guarded.	Have hand rails.
1216.	4	.....	O	R	.....	60	51	51	.....	51	.....	....	....	....	....	....	....
1217.	P 1	.....	L	..	60	60	5	2	3	5	.....	....	....	....	1	Y	Y
1218.	2	1	O	..	60	60	6	6	.....	6	.....	....	....	....	2	..	..
1219.	1	.....	O	..	60	60	5	5	.....	5	.....	....	....	....	1	....	Y
1220.	.....	P 1	L	..	60	60	18	13	5	18	.....	....	....	1	1	Y	..
1221.	5	.....	O	..	60	60	20	15	.....	15	.....	....	....	1	1	Y	Y
1222.	3	.....	O	I	60	.....	48	.....	.....	.....	.....	....	....	1	2	..	..
1223.	3	.....	O	R	60	60	50	27	.....	27	.....	....	....	....	1	..	..
1224.	3	.....	O	..	60	60	26	26	.....	26	.....	....	....	....	....	....	....
1225.	2	.....	L	..	60	60	20	20	.....	20	.....	....	....	....	4	Y	Y
1226.	.....	P 1	L	..	60	60	50	10	40	50	.....	....	....	....	....	....	....
1227.	6	.....	.....	..	66	66	300	115	185	300	.....	....	2	....	2	Y	Y
1228.	2	.....	O	..	60	60	12	(12	.....	12	.....	....	....	....	1	..	..
1229.	1	.....	L	..	60	60	6	6	.....	6	.....	....	....	....	2	..	..
1230.	5	2	O	..	60	59	250	117	.....	117	.....	....	....	1	5	..	..
1231.	1	.....	L	..	60	60	12	5	.....	5	.....	....	....	....	1	..	..
1232.	.....	.....	.....	..	60	60	110	6	104	110	.....	....	....	....	1	..	..
1233.	.....	1	L	..	60	60	100	58	42	100	10	....	1	1	....	..	..
1234.	3	.....	L	..	60	60	30	15	.....	15	.....	....	....	....	2	..	..
1235.	4	.....	O	..	84	84	9	9	.....	9	.....	....	....	....	1	..	..
1236.	.....	P 1	L	..	60	60	10	5	5	10	1	....	....	....	....	....	....
1237.	.....	P 1	L	..	60	60	9	7	2	9	1	....	....	2	....	Y	Y
1238.	.....	P 1	L	..	60	30	69	41	28	69	4	....	....	....	1	..	..
1239.	.....	P 1	L	..	60	60	6	3	3	6	.....	....	....	....	....	....	....
1240.	.....	2	O	..	66	66	40	20	20	40	1	....	....	....	1	....	Y
1241.	4	.....	O	R	60	60	5	4	1	5	.....	....	....	....	2	Y	Y
1242.	1	.....	L	..	48	48	8	7	1	8	1	....	....	1	1	..	..
1243.	2	.....	O	..	60	60	10	10	.....	10	.....	....	....	....	1	..	..
1244.	2	1	O	..	60	60	50	30	20	50	.....	....	....	....	....	..	..
1245.	1	.....	L	..	60	60	5	2	3	5	.....	....	....	....	....	....	....
1246.	.....	1	O	..	60	60	30	27	3	30	4	....	....	....	1	Y	Y
1247.	1	.....	L	..	60	60	16	4	12	16	.....	....	....	....	1	..	..
1248.	1	.....	L	..	60	60	7	7	.....	7	1	....	....	....	1	....	Y

CHIPPEWA COUNTY.

	Doors.		Elevators					Closets.							Horse-Power		
Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1211.	O	N	.....	.....	.....	.....	.....	N	.....	G	32	....	1	1	75	....	....

BAYFIELD COUNTY.

1212.	.....	N	.....	.....	.....	.....	.....	Y	.....	G	52	....	....	....	....	....	....
1213.	Y	..	.....	.....	.....	.....	Y	..	.....	G	30	....	3	2	500	....	....
1214.	O	..	.....	.....	.....	.....	N	..	.....	G	32	....	3	2	....	....	....

DUNN COUNTY.

1215.	..	N	.....	.....	.....	.....	Y	Y	.....	G	50	....	3	2	140	....	....

ROCK COUNTY.

1216.	.....	N	.....	.....	.....	.....	Y	Y	.....	G	52	....	1	1	150	....	....
1217.	I	..	.....	.....	.....	.....	..	..	Y	G	52	....	....	....	....	....	....
1218.	I	..	.....	.....	.....	.....	..	..	.....	G	39	....	....	....	....	100	....
1219.	.....	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	10	....
1220.	I	..	1	Y	D	Y	..	..	Y	G	52	....	1	1	....	....	7
1221.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	125	....	30
1222.	O	..	.....	.....	.....	.....	..	..	.....	....	20	....	2	2	110	....	....
1223.	I	..	1	Y	D	Y	.....	Y	Y	G	38	....	1	2	100	....	....
1224.	.....	..	.....	.....	.....	.....	Y	..	.....	G	49	....	1	1	100	....	....
1225.	O	..	2	Y	B	Y	..	..	N	G	45	....	....	....	....	....	12
1226.	.....	..	.....	.....	.....	.....	.....	..	Y	G	40	....	1	....	....	....	3
1227.	O	..	1	Y	G	Y	Y	..	..	G	45	....	3	1	125	475	....
1228.	O	.....	.....	.....	.....	.....	..	..	.....	G	52	....	3	2	200	....	....
1229.	I	N	1	Y	B	Y	..	..	Y	G	52	....	....	....	....	....	....
1230.	I	..	5	..	G	..	..	..	.....	G	52	....	4	1	150	....	....
1231.	I	.....	.....	.....	.....	.....	..	..	.....	G	32	....	....	....	....	....	30
1232.	I	N	.....	.....	.....	.....	..	..	Y	G	52	....	1	1	15	....	....
1233.	I	..	1	Y	D	Y	..	..	..	G	46	....	....	....	....	20	....
1234.	I	..	1	..	D	..	..	..	..	G	45	....	....	....	....	40	....
1235.	I	..	1	..	.....	..	..	N	N	G	52	....	2	2	100	....	....
1236.	.....	.....	.....	.....	.....	.....	..	Y	Y	G	52	....	....	....	....	....	....
1237.	I	.....	.....	.....	.....	.....	..	..	..	G	52	....	....	....	....	....	3½
1238.	O	N	1	Y	.....	Y	..	..	..	G	35	....	1	1	....	....	....
1239.	.....	.....	.....	.....	.....	..	..	..	..	G	52	....	1	1	8	....	....
1240.	I	N	1	Y	D	..	..	..	..	G	52	....	1	1	75	....	....
1241.	I	.....	1	.....	D	.....	Y	Y	.....	G	50	....	....	....	....	....	50
1242.	I	N	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1243.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1244.	I	..	1	Y	B	.....	..	..	Y	G	50	....	1	1	18	....	....
1245.	.....	..	.....	.....	.....	.....	..	..	.....	G	.....	....	1	1	7	....	....
1246.	I	..	1	Y	.....	N	..	..	.....	G	40	....	1	1	8	....	....
1247.	I	.....	1	..	D	Y	..	..	Y	G	52	....	....	....	....	....	4
1248.	.....	N	.....	.....	.....	.....	..	.....	..	G	52	....	1	1	10	....	....

JEFFERSON.

		Buildings.		Plant.		Hours per Week.		Employees.							Stairways.			
									Date of Inspection.									
Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1249.	P	1	.....	L	R	60	60	5	3	.....	3	.....	....	....	....	1	....	....
1250.		3	2	O	..	60	60	26	26	.....	26	.....	....	....	....	2	Y	Y
1251.		5	1	O	..	60	60	115	78	24	102	4	....	....	....	3	..	..
1252.		2	.....	L	..	60	60	12	9	.....	9	.....	....	....	....	1	..	..
1253.		1	1	O	..	60	60	5	3	.....	3	.....	....	....	....	1	..	..
1254.		4	.....	O	..	60	60	5	3	.....	3	.....	....	....	....	2	..	..
1255.	P	1	.....	L	..	60	60	6	5	1	6	1	....	....	....	....	....	....
1256.		1	1	L	..	60	60	51	1	.....	1	.....	....	....	....	1	Y	Y
1257.		4	.....	O	..	60	60	57	57	.....	57	3	....	....	....	1	....	....
1258.		3	.....	O	..	60	60	14	9	5	14	2	....	....	....	2	Y	Y
1259.		1	.....	O	..	66	66	2	2	.....	2	.....	....	....	....	....	....	....
1260.	P	1	.....	L	..	60	60	5	5	.....	5	2	....	....	....	....	....	....
1261.		5	.....	O	..	60	60	10	6	.....	6	.....	....	1	....	2	Y	Y
1262.		2	.....	O	..	60	60	20	15	.....	15	2	....	....	....	....	....	....
1263.	P	1	.....	O	..	60	60	11	11	.....	11	3	....	....	....	....	....	....
1264.		2	.....	O	..	66	60	5	3	.....	3	.....	....	....	....	1	Y	Y
1265.		2	.....	O	..	60	60	6	2	.....	2	.....	....	....	....	....	....	....
1266.		4	1	O	..	60	60	35	24	.....	24	.....	....	....	1	2	Y	Y
1267.		3	.....	O	..	60	60	8	4	.....	4	.....	....	....	....	5	..	..
1268.		4	2	O	..	60	60	14	10	.....	10	.....	....	....	....	3	..	..
1269.		7	.....	O	..	60	60	20	10	.....	10	.....	....	....	....	2	..	..
1270.		3	2	O	..	60	60	50	27	4	31	4	....	....	....	1	..	..

KAUKAUNA.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1271.		1	.....	L	I	144	.....	15	.....	.....	.....	....	....	....	....	1	Y	Y
1272.		22	.....	O	R	60	60	216	216	.....	216	.....	....	....	2	8	..	..
1273.		2	.....	O	..	72	72	15	8	.....	8	.....	....	....	....	1	..	..
1274.		1	.....	O	..	60	60	6	2	.....	2	.....	....	....	1	1	..	..
1275.		2	.....	O	..	60	60	5	2	.....	2	.....	....	....	....	....	....	....
1276.		5	.....	O	..	144	144	50	44	.....	44	.....	....	....	....	1	Y	Y
1277.		5	.....	O	..	60	60	15	9	.....	9	.....	....	....	....	1	..	..
1278.		4	.....	O	...	60	54	30	10	.....	10	1	....	....	....	1	..	..
1279.		1	.....	L	..	60	60	10	5	1	6	.....	....	....	....	....	....	....
1280.		1	.....	L	..	60	60	5	3	.....	3	.....	....	....	....	....	Y	Y
1281.		4	1	O	R	144	144	110	78	32	110	[illegible]	....	....	1	2	..	..
1282.		2	.....	O	..	66	66	5	5	.....	5	.....	....	....	....	1	....	..
1283.		3	.....	O	..	60	60	10	4	.....	4	[illegible]	....	....	....	1	Y	..
1284.		8	.....	O	..	144	144	87	73	14	87	[illegible]	....	....	1	1	..	..
1285.		1	.....	O	..	66	66	5	4	.....	4	.....	....	....	....	1	..	..
1286.		6	.....	O	..	144	144	50	50	.....	50	.....	....	....	....	4	..	..

KESHENA.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1287.		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....

KENOSHA.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1288.		1	4	O	R	60	60	463	454	.....	454	.....	....	....	5	6	Y	Y
1289.		19	7	O	..	60	60	175	175	.....	175	.....	....	....	7	3	..	..
1290.		8	.....	O	..	60	60	200	144	6	150	.....	....	....	....	....	....	....
1291.		5	.....	O	..	60	60	300	50	250	300	.....	....	....	2	1	Y	Y
1292.		1	.....	L	.	60	60	10	8	7	10	.....	....	....	....	....	....	....

JEFFERSON COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1249.	.....	.....	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	6	....	....
1250.	Y	N	1	Y	B	Y	..	.....	.....	G	52	....	2	1	80	....	....
1251.	I	..	1	..	D	..	..	Y	Y	G	52	....	1	1	40	....	....
1252.	I	..	.....	.....	.....	.....	..	.....	.....	G	40	....	1	1	12	....	....
1253.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	75	115	....
1254.	I	..	.....	.....	.....	.....	..	.....	.....	F	52	....	1	1	20	....	....
1255.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	1	4	....	1
1256.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	6	....	....
1257.	.....	..	.....	.....	.....	.....	..	.....	.....	G	26	....	1	1	60	....	....
1258.	I	..	.....	.....	.....	.....	..	Y	Y	G	52	....	1	....	6	....	....
1259.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	2	1	125	....	....
1260.	I	..	.....	.....	.....	.....	..	Y	.....	G	52	....	....	....	....	....	....
1261.	I	..	.....	.....	.....	.....	..	.....	.....	G	26	....	1	....	....	75	....
1262.	I	..	.....	.....	.....	.....	..	.....	.....	G	20	....	1	1	35	....	....
1263.	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1264.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	30	....	....
1265.	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	52	....	1	1	15	....	....
1266.	S	N	3	Y	G	Y	Y	.....	.....	G	52	....	1	1	20	....	....
1267.	S	..	.....	.....	.....	.....	..	.....	.....	F	52	....	1	1	40	....	....
1268.	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	3	2	60	....	....
1269.	I	N	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	20	....	....
1270.	S	..	1	Y	D	Y	.....	.....	.....	G	45	1	1	1	160	....	....

OUTAGAMIE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1271.	I	N	.....	.....	.....	.....	Y	.....	.....	F	.....	....	....	....	....	400	....
1272.	I	..	1	Y	B	Y	Y	Y	.....	G	52	....	4	1	60	....	....
1273.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	....	....	550	....
1274.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	6	....	....
1275.	.....	..	.....	.....	.....	.....	..	.....	.....	G	52	....	2	1	180	200	.. .
1276.	I	..	.....	.....	.....	.....	..	.....	.....	F	52	....	4	1	250	100	....
1277.	I	..	.....	.....	.....	.....	N	.....	.....	G	52	....	1	1	35	50	....
1278.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	12	....	....
1279.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	6	....	....
1280.	I	..	.....	.....	.....	.....	..	Y	.....	G	52	....	1	1	8	....	.. .
1281.	I	..	2	Y	T	Y	..	..	Y	G	52	....	2	....	....	1500	....
1282.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	....	....	300	....
1283.	O	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	....	....	50	....
1284.	S	..	2	Y	T	Y	..	Y	Y	G	52	....	3	2	200	275	....
1285.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	80	....
1286.	I	..	3	Y	T	Y	..	..	.....	G	52	....	2	4	350	800	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1287.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....

KENOSHA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1288.	S	..	1	Y	D	Y	Y	Y	.....	G	52	....	7	3	450	....	....
1289.	I	..	5	Y	B	..	..	..	.....	G	40	....	3	1	300	....	....
1290.	S	..	.....	.....	.....	.....	..	..		G	40	....	6	7	350	....	....
1291.	S	..	1	Y	G	Y	..	..	Y	G	50	....	4	5	250	....	....
1292.	.....	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	10	....	....

KENOSHA.

Running number.		Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
									Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1293.		2	.....	O	R	60	60	12	12	.....	12	.....	...	....	1	1	Y	Y
1294.	P	1	.....	L	..	54	54	8	7	1	8	.....	...	....	....	1	....	..
1295.		5	.....	O	..	60	60	50	33	.....	33	.....	...	....	1	1	Y	..
1296.	P	1	.....	L	..	60	60	10	7	.....	7	.....	..	....	....	....	....	....
1297.	P	1	.....	L	..	54	54	9	7	2	9	1	...	....	1	1	Y	Y
1298.		1	.....	L	..	60	60	10	4	6	10	1	...	....	....	1	..	..
1299.		1	3	O	..	60	60	268	250	18	268	100	...	....	....	5	..	..
1300.		3	.....	O	..	60	60	5	5	.....	5	.....	..	....	....	....	....	....
1301.		2	3	O	..	60	60	16	16	.....	16	.....	...	....	....	3	Y	Y
1302.		4	.....	O	..	60	60	10	10	.....	10	1	...	....	1	1	..	..
1303.		14	.....	O	..	60	60	450	340	.....	340	8	..	....	....	4	....	....
1304.		5	.....	O	..	60	60	[illegible]	300	.....	300	12	...	....	....	3	Y	Y
1305.		1	.....	L	..	60	60	12	8	.....	8	.....	...	....	....	....	..	..
1306.		3	.....	O	..	60	60	60	15	.....	15	.....	...	....	....	1	....	Y
1307.		1	.....	L	..	60	60	44	36	8	44	10	...	....	....	2	....	Y

KEWAUNEE.

1308.		5	.....	O	R	60	60	15	5	.....	5	.....	...	....	....	1	Y	Y
1309.		4	.....	O	..	60	60	40	18	.....	18	.....	...	....	....	1	..	..
1310.		1	.....	O	..	60	60	5	3	1	4	.....	...	....	....	....	....	....
1311.		3	.....	O	..	60	60	5	4	.....	4	.....	...	....	....	1	Y	Y
1312.		2	1	O	I	.....	.....	6	.....	.....	.....	....	...	....	....	2	..	..
1313.	P	2	.....	L	R	60	60	6	3	.....	3	.....	...	....	....	1	..	..
1314.		1	.....	L	..	60	60	5	3	2	5	.....	...	....	....	....	....	....
1315.		2	.....	O	..	60	60	20	12	.....	12	.....	...	....	....	1	Y	Y
1316.		3	1	O	..	144	144	90	45	45	90	.....	...	....	....	1	..	..
1317.		1	.....	O	..	60	60	5	3	.....	3	....	...	....	....	....	....	....

KIEL.

1318.		2	2	O	R	60	60	52	52	.....	52	8	...	....	....	2	N	....
1319.		7	.....	O	..	60	60	50	50	.....	50	14	2	....	....	1	Y	Y

KILBOURN.

1320.		4	.....	O	R	60	60	12	9	.....	9	.....	...	....	....	1	Y	Y

KIMBALL.

1321.		8	.....	O	R	60	66	25	15	.....	15	.....	...	....	2	3	Y	Y

KIMBERLY.

1322.		15	2	O	R	144	144	163	163	7	170	10	...	....	....	3	Y	Y

KENOSHA COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1293.	I	N	.....	.....	.....	.....	Y	Y	.....	G	47	....	1	1	50	....	....
1294.	I	..	.....	.....	.....	.....	.....	..	Y	G	52	....	....	1	3	....	....
1295.	S	..	1	Y	D	Y	..	..	N	G	49	....	1	2	110	....	....
1296.	.....	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	1	4	....	1
1297.	I	..	.....	.....	.....	.....	.....	..	Y	G	52	....	....	2	....	....	....
1298.	I	..	.....	.....	.....	.....	.....	..	..	G	24	....	1	1	10	....	....
1299.	S	..	1	Y	D	Y	Y	..	..	G	50	....	4	1	375	....	....
1300.	.....	..	.....	.....	.....	.....	.....	..	..	G	52	....	....	....	....	....	....
1301.	O	..	.....	.....	.....	.....	.....	..	.....	G	30	....	2	2	150	....	....
1302.	S	..	.....	.....	.....	.....	.....	..	Y	G	50	....	....	1	7	....	....
1303.	S	..	2	Y	B	Y	Y	..	N	G	45	....	4	2	150	....	....
1304.	S	..	.....	.....	.....	.....	..	..	..	G	52	....	4	3	400	....	....
1305.	.....	..	.....	.....	.....	.....	..	..	.....	G	50	....	1	1	15	....	....
1306.	S	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	45	....	....
1307.	I	..	.....	.....	.....	.....	..	..	.....	G	50	....	1	1	17	....	....

KEWANEE COUNTY.

1308.	S	N	.....	.....	.....	.....	Y	Y	.....	G	52	....	1	1	20	....	....
1309.	I	..	.....	.....	.....	.....	..	.....	.....	F	45	....	1	1	15	....	....
1310.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	3	....	....
1311.	O	..	.....	.....	.....	.....	N	.....	.....	G	52	....	1	1	10	....	....
1312.	I	.....	.....	.....	.....	.....	Y	.....	.....	G	.....	....	1	1	250	....	....
1313.	I	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1314.	I	..	.....	.....	.....	.....	.....	Y	Y	G	52	....	....	....	....	....	....
1315.	O	..	.....	.....	.....	.....	Y	.....	.....	G	40	....	1	1	30	....	....
1316.	I	..	1	Y	B	Y	..	Y	Y	G	52	....	1	1	93	....	....
1317.	I	..	.....	.....	.....	.....	..	.....	.....	F	26	....	1	1	10	....	....

MANITOWOC COUNTY.

1318.	I	N	2	Y	B	Y	N	.....	.....	G	52	....	2	1	125	....	....
1319.	S	..	.....	.....	.....	.....	..	.....	.....	F	52	....	2	1	35	....	....

COLUMBIA COUNTY.

1320.	I	N	.....	....		Y	.....	.....	.....	F	52	....	1	1	12	....	....

IRON COUNTY.

1321.	S	N	.....	....		.....	Y	Y	.....	G	45	....	2	1	100	....	....

OUTAGAMIE COUNTY.

1322.	S	N	4	Y	T	Y	Y	Y	Y	G	52	....	11	1	200	3000	....

LAKE MILLS.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1323.	1	1	O	R	60	60	5	3		3					1	Y	Y
1324.	9	1	O	..	60	60	63	32		32					3	Y	Y
1325.	P 1		L	..	60	60	5	4		4							
1326.	1		O	..	60	60	6	2		2					1	Y	Y
LEHIGH.																	
1327.			O	R	66	66	30	6		6				2	1	Y	Y
LENA.																	
1328.			O	R	144	144	5	5		5					1	Y	Y
LEON.																	
1329.	1		L	I	60												
LITTLE CHUTE.																	
1330.	4		O	R	72	72	65	65		65					4	Y	Y
LA CROSSE.																	
1331.		1	L	R	60	60	35	15	11	26				1	1	Y	Y
1332.		3	O	..	60	60	122	7	115	122			1		2	..	..
1333.		1	L	R	60	60	20	20		20			1	1	1	..	..
1334.		P 1	L	..	60	60	27	26	1	27	5						
1335.	1	1	O	..	60	60	8	7		7			1	1	1	Y	Y
1336.	6		O	..	54	54	160	160		160					2	..	..
1337.	3		O	..	74	74	42	42		42							
1338.	10		O	I	60		316	70		70				1	2	Y	Y
1339.	5	2	O	R	60	60	80	68		68			2	1	1	..	..
1340.	1		O	..	60	60	20	15	1	16							
1341.	1		L	..	48	48	31	31		31	6				2	Y	Y
1342.	3		O	..	60	60	38	30	8	38	2				2	..	..
1343.	5		O	..	60	60	8	8		8				2		..	..
1344.	6		O	..	60	60	5	5		5					3	..	..
1345.		1	L		60	60	15	8	7	15			1		1	..	..
1346.	2		O	..	60	60	10	6		5	1						
1347.		P 2	L	..	60	60	90	15	38	53	12		1		1	Y	Y
1348.	4		O	..	60	48	20	9		9					2	..	..
1349.	1		L	..	60	60	35	5	20	25				1	1	..	..
1350.	9		O	I	60		120							2	1	..	..
1351.	2		O	R	60	60	41	39	2	41	2				2	..	..
1352.	7	2	O	..	77	77	77	60	6	66	6		2	1	3	..	..
1353	3		O	..	59	59	25	20		20	2			1	1	..	..
1354.	P 1		L	..	60	60	5	3	2	5	1			1	1	..	..
1355.	5	3	O	..	60	60	35	35		35	3		2		2	..	..

JEFFERSON COUNTY.

Running number.	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1323.	S	N	.....	.....	.....	.....	N	.....	.....	G	52	....	1	1	45	....	....
1324.	I	..	2	Y	D	Y	Y	.....	.....	G	52	....	2	1	125	....	....
1325.	I	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	....	5	....	....
1326.	I	..	.....	.....	.....	.....	..	.....	.....	G	26	....	1	1	8	12	....

BARRON COUNTY.

1327.	S	N	.....	.....	.....	.....	Y	Y	.....	F	18	....	3	2	90	....	....

OCONTO COUNTY.

1328.	I	N	.....	.....	.....	.....	Y	Y	.....	....	52	....	1	1	100	....	....

MONROE COUNTY.

1329.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....

OUTAGAMIE COUNTY.

1330.	I	N	.....	.....	.....	.....	Y	Y	.....	G	46	....	1	....	....	3000	....

LA CROSSE COUNTY.

1331.	O	N	.....	.....	.....	.....	Y	Y	Y	G	52	N	....	1	....	....	5
1332.	I	..	2	Y	D	Y	..	..	..	G	44	..	1	1	15	....	....
1333.	O	..	.....	.....	.....	..	..	..	..	G	52	N	1	1	6	....	....
1334.	.....	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	12	....	....
1335.	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	2	85	....	....
1336.	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	5	2	45	....	....
1337.	.....	..	.....	.....	.....	.....	..	..	.....	G	52	..	2	1	60	....	....
1338.	I	..	.....	.....	.....	.....	..	..	.....	G	32	..	7	8	550	....	....
1339.	O	..	1	Y	D	Y	..	..	.....	G	52	..	5	1	75	....	....
1340.	.....	..	.....	.....	.....	.....	..	..	Y	G	52	..	....	....	....	....	....
1341.	O	..	1	Y	B	Y	..	..	.....	G	52	..	....	....	....	....	....
1342.	S	..	.....	.....	.....	.....	..	..	.....	G	12	..	8	1	350	....	....
1343.	I	..	.....	.....	.....	.....	..	..	.....	G	40	..	1	1	8	....	....
1344.	O	..	.....	.....	.....	.....	..	..	.....	G	50	..	1	1	25	....	....
1345.	O	..	1	Y	D	Y	..	..	Y	G	52	..	....	....	....	....	....
1346.	.....	..	.....	.....	.....	.....	..	..	..	G	52	..	1	1	7	....	....
1347.	O	..	1	Y	D	Y	..	..	..	G	46	..	....	....	....	....	....
1348.	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	1	1	....	....	14
1349.	O	..	1	.....	.....	.....	..	..	Y	G	52	..	1	1	40	....	....
1350.	O	..	.....	.....	.....	.....	.....	..	.....	G	14	..	6	2	150	....	....
1351.	S	..	.....	.....	.....	.....	Y	..	Y	G	18	..	3	1	80	....	....
1352.	O	..	.....	.....	.....	.....	..	..	..	G	52	..	3	3	275	....	....
1353.	I	..	.....	.....	.....	.....	..	..	.....	G	52	..	....	1	....	....	....
1354.	I	..	.....	.....	.....	.....	..	..	Y	G	52	..	....	....	....	....	....
1355.	O	.....	.....	.....	.....	.....	..	..	..	G	52	..	3	6	200	....	....

LA CROSSE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection. Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1356.	6	.....	O	R	60	60	177	167	10	177	5	...	....	2	2	Y	Y
1357.	1	1	L	..	60	60	7	7	.....	7	.....	...	1	1	1	..	..
1358.	4	.....	O	..	48	48	45	35	.....	35	1	...	....	....	2	..	..
1359.	1	1	L	..	60	60	20	5	13	18	8	...	1	....	3	..	..
1360.	3	2	O	..	48	48	75	45	.....	45	[illegible]	...	2	1	3	..	..
1361.	3	.....	O	..	54	54	15	15	.....	15	.....	..	....	....	1	..	..
1362.	P 3	.....	L	..	54	54	35	15	5	20	2	X	X	2	....	I	...
1363.	3	.....	O	..	60	60	8	8	.....	8	.....	...	1	1	1	..	..
1364.	2	.....	O	..	115	115	38	36	2	38	.....	...	....	....	....	....	....
1365.	1	.....	O	..	168	168	5	5	.....	5	.....	..	....	....	....	....	....
1366.	1	1	O	..	48	48	5	5	.....	5	.....	..	....	....	....	....	....
1367.	1	.....	O	..	60	60	50	20	10	30	6	..	....	....	4	Y	Y
1368.	1	.....	O	..	168	168	13	12	1	13	1	...	....	....	....	....	....
1369.	5	.....	O	..	60	60	12	12	.....	12	.....	...	....	....	2	Y	Y
1370.	5	.....	O	..	168	168	9	9	.....	9	.....	...	....	....	....	....	....
1371.	.....	2	O	..	45	45	125	20	105	125	50	...	2	....	3	Y	Y
1372.	2	2	L	..	120	120	16	15	1	16	....	...	1	....	4	Y	Y
1373.	6	.....	O	..	60	60	221	210	11	221	2	...	....	....	3	....	Y
1374.	P 1	.....	L	..	60	60	8	3	5	8	2	...	....	1	1	Y	..
1375.	.....	2	O	..	60	60	75	75	.....	75	[illegible]	...	2	1	3	..	..
1376.	1	.....	L	..	66	66	23	22	1	23	3	...	....	....	2	..	..
1377.	.....	1	O	R	60	60	6	6	.....	6	.....	...	....	....	2	Y	Y
1378.	1	.....	L	..	60	60	9	5	.....	5	4	...	....	....	....	....	....
1379.	1	1	L	..	48	48	50	9	30	39	.....	...	1	....	4	....	Y
1380.	2	.....	L	..	60	60	25	12	2	14	2	...	....	....	2	Y	..
1381.	1	.....	L	..	60	60	5	5	.....	5	.....	...	....	....	1	..	..
1382.	4	.....	L	..	48	48	6	3	.....	3	....	...	....	1	1	..	..
1383.	1	1	O	I	60	....	.....	.....	.....	.....	.....	...	1	....	3	..	..
1384.	4	2	O	R	144	144	45	45	.....	45	.....	...	2	....	2	..	..
1385.	1	1	L	..	60	60	50	12	1	13	2	...	1	....	2	..	..
1386.	10	3	O	..	60	60	70	55	6	61	8	...	2	....	2	..	..
1387.	1	.....	O	I	60	....	16	.....	.....	.....	3	...	....	....	2	....	..
1388.	1	.....	O	R	60	60	12	11	1	12	.....	...	....	....	2	Y	..
1389.	4	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	2	..	..
1390.	4	.....	O	..	60	48	30	13	.....	13	.....	...	....	1	1	..	..
1391.	.....	1	L	..	48	48	70	52	18	70	6	...	1	....	2	..	..
1392.	6	.....	O	..	60	48	350	72	.....	72	3	...	....	2	2	..	..
1393.	1	.....	L	..	60	60	10	4	3	7	4	...	....	....	1	..	..
1394.	1	.....	O	..	60	60	21	19	2	21	3	...	1	1	1	..	..
1395.	1	2	O	..	50	50	140	50	90	140	.....	...	2	....	3	..	..
1396.	8	.....	O	..	60	60	300	300	.....	300	10	...	....	2	3	..	..
1397.	2	3	O	..	60	60	150	100	.....	100	.....	...	2	2	5	..	..
1398.	5	.....	O	..	60	60	35	35	.....	35	4	...	....	1	1	..	..
1399.	1	.....	L	..	54	54	10	6	.....	6	.....	...	....	....	....	....	....
1400.	P 1	.....	L	..	60	60	6	6	.....	6	1	...	....	....	....	....	....
1401.	.....	P 1	L	..	60	48	25	1	20	21	3	...	1	....	2	Y	Y
1402.	1	.....	L	..	60	60	11	4	5	9	.....	...	....	....	1	..	..
1403.	5	.....	O	..	60	60	80	75	5	80	5	...	....	....	3	..	..
1404.	.....	P 1	L	..	54	54	5	5	.....	5	2	...	....	1	1	..	..
1405.	1	.....	O	..	48	48	11	8	.....	8	.....	...	....	1	1	..	..
1406.	9	.....	O	..	60	60	85	20	.....	20	.....	...	....	1	1	..	..
1407.	2	.....	O	..	66	66	5	5	.....	5	.....	...	....	....	5	..	..

LA CROSSE COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1356.	S	N	....	....	....	....	N	Y	Y	G	8	1	7	5	650	....	....
1357.	I	..	....	....	....	....	Y	..	....	G	52	....	1	1	125	....	....
1358.	O	..	....	....	....	....	..	..	....	G	52	....	1	1	25	....	....
1359.	I	..	1	Y	T	Y	..	..	Y	G	52	....	....	....	....	....	....
1360.	O	..	2	..	D	..	..	..	....	G	52	....	2	1	80	....	....
1361.	O	..	1	Y	D	..	..	..	....	G	52	....	1	1	35	....	....
1362.	I	..	1	Y	D	..	..	..	Y	G	48	....	1	....	....	....	10
1363.	....	..	....	....	....	..	....	....	....	....	52	....	2	2	275	....	....
1364.	....	....	....	....	....	....	....	....	....	....	52	....	2	1	250	....	....
1365.	....	N	....	....	....	....	Y	....	....	....	52	....	4	4	75	....	....
1366.	O	..	2	Y	D	Y	..	Y	....	G	52	....	1	1	30	....	....
1367.	I	..	1	Y	D	..	..	..	Y	G	52	....	1	1	25	....	....
1368.	O	..	....	....	....	....	..	..	..	G	52	....	3	4	700	....	....
1369.	O	..	....	....	....	....	..	..	....	G	52	....	....	1	....	....	10
1370.	....	....	....	....	....	....	..	..	....	F	52	....	3	2	12	....	....
1371.	O	..	2	Y	D	Y	..	..	Y	G	38	....	1	1	60	....	....
1372.	O	..	1	Y	D	..	..	..	..	G	24	....	1	1	120	....	....
1373.	S	....	....	....	....	..	..	..	....	G	20	....	10	3	700	....	....
1374.	I	N	....	....	....	....	..	..	Y	G	52	....	....	....	....	....	....
1375.	O	..	2	Y	D	Y	..	..	....	G	52	....	1	3	100	....	....
1376.	O	..	1	Y	D	..	..	..	Y	....	52	....	....	1	....	....	7½
1391.	....	....	1	Y	D	Y	Y	Y	Y	G	52	N	1	1	24	....	....
1377.	O	N	1	Y	....	....	..	....	....	....	52	..	....	....	....	....	....
1378.	....	..	....	....	B	Y	..	Y	Y	G	52	..	1	1	15	....	....
1379.	I	..	1	Y	D	..	..	..	..	G	52	..	....	1	....	....	8
1380.	O	..	1	..	....	....	....	..	....	G	52	..	....	....	....	....	....
1381.	O	..	....	....	D	Y	Y	..	....	G	52	..	1	1	80	....	....
1382.	....	..	1	Y	D	..	..	..	Y	G	....	..	1	1	35	....	....
1383.	O	..	2	..	....	....	..	..	....	G	52	..	3	1	450	....	....
1384.	O	..	....	....	....	....	....	..	Y	G	51	..	....	1	....	....	7½
1385.	I	..	1	Y	....	....	Y	..	..	....	52	..	3	4	190	....	....
1386.	O	..	....	....	....	....	..	..	....	G	52	..	....	1	....	....	1
1387.	....	..	....	....	T	Y	..	..	Y	G	52	..	....	1	....	....	6
1388.	O	..	1	Y	....	....	..	..	....	G	52	..	1	1	20	....	....
1389.	O	..	....	....	....	....	....	..	....	G	52	..	1	1	50	....	....
1390.	O	..	....	....	D	Y	Y	....	....	G	48	..	....	....	....	....	....
1392.	I	N	....	....	....	....	..	Y	....	G	26	..	2	2	800	....	....
1393.	O	..	....	....	....	....	..	..	Y	....	44	....	....	1	....	....	10
1394.	O	..	1	Y	G	Y	..	..	..	G	52	N	1	1	12	....	....
1395.	O	..	2	..	D	..	..	..	..	G	52	..	....	1	....	....	4
1396.	I	..	....	....	....	....	..	..	....	G	32	..	6	2	600	....	....
1397.	S	..	3	Y	D	Y	..	..	....	G	46	1	4	1	100	....	....
1398.	I	..	....	....	....	....	..	..	....	G	52	N	2	1	25	....	....
1399.	....	..	....	....	....	....	..	..	....	....	45	....	....	....	....	....	....
1400.	....	..	....	....	....	....	..	..	....	G	52	N	....	....	....	....	....
1401.	O	..	....	....	....	....	..	..	Y	....	43	..	....	....	....	....	....
1402.	O	..	....	....	....	....	..	..	..	....	52	..	1	1	....	....	....
1403.	....	..	....	....	....	....	....	....	....	....	32	..	....	....	....	....	....
1404.	I	..	1	Y	B	Y	....	Y	....	G	52	..	....	....	....	....	....
1405.	I	..	....	....	....	....	Y	..	....	G	52	..	....	1	....	....	10
1406.	O	..	1	Y	B	Y	..	..	....	G	22	..	1	1	75	....	....
1407.	O	..	....	....	....	....	..	..	....	G	52	..	1	1	60	....	....

LAC DU FLAMBEAU.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1408.	4	.....	O	R	60	60	200	175	.....	175	....	....	....	4	2	Y	Y
1409.	4	.....	O	..	60	60	17	17	.....	17	....	..	....	....	....	....	....

LOYAL.

1410.	5	.....	O	I	60	.....	25	5	.....	5	....	....	....	....	1	Y	Y
1411.	1	.....	O	R	60	60	3	3	.....	3	....	....	....	....	....	....	....
1412.	8	.....	O	..	60	60	20	18	.....	18	....	....	....	1	....	Y	Y

MADISON.

1413.	1	.....	O	R	60	60	24	4	20	24	....	....	....	....	....	....	....
1414.	P 1	.....	L	..	60	60	6	5	1	6	....	....	....	1	1	Y	Y
1415.	.....	P 1	L	..	48	48	8	8	.....	8	2	....	....	....	1	..	..
1416.	3	.....	O	..	60	60	5	5	.....	5	....	....	....	1	1	..	..
1417.	.....	1	L	..	60	60	5	2	.....	2	....	....	....	....	....	....	....
1418.	.....	1	O	..	60	60	15	5	10	15	....	....	1	....	1	Y	Y
1419.	4	1	O	..	108	108	12	11	.....	11	....	....	....	....	1	..	..
1420.	5	.....	O	..	60	60	33	28	.....	28	....	....	....	....	1	..	..
1421.	.....	1	O	..	60	60	17	17	.....	17	....	....	....	....	....	....	....
1422.	1	.....	O	..	96	96	75	55	20	75	....	....	....	....	1	Y	Y
1423.	.....	1	O	..	60	60	11	6	5	11	....	....	....	....	1	..	..
1424.	3	5	O	..	60	60	9	8	1	9	....	....	2	....	4	..	..
1425.	.....	P 2	L	..	60	60	25	2	12	14	....	....	1	....	1	..	..
1426.	10	.....	O	I	60	.....	60	18	.....	18	....	....	....	....	1	..	..
1427.	7	3	O	R	60	60	350	300	.....	300	[illegible]	....	....	....	3	..	..
1428.	2	.....	O	..	60	60	110	110	.....	110	....	....	....	....	....	....	....
1429.	P 2	.....	L	..	48	48	18	18	.....	18	[illegible]	....	....	....	....	....	....
1430.	1	.....	L	..	60	60	15	6	.....	6	....	....	....	....	1	Y	Y
1431.	3	2	O	..	60	60	25	25	.....	25	....	....	....	....	4	..	..
1432.	1	.....	O	..	60	60	50	22	.....	22	....	....	....	....	....	....	....
1433.	2	.....	O	..	60	60	35	30	.....	30	....	....	....	1	4	Y	Y
1434.	1	.....	..O	..	60	.....	6	3	.....	3	....	....	....	....	1	..	..
1435.	.....	P 1	L	..	60	60	14	7	7	14	....	....	1	....	1	..	..
1436.	4	.....	O	..	144	144	9	9	.....	9	....	....	....	....	....	....	....
1437.	4	.....	O	..	60	60	16	14	.....	14	....	....	....	....	....	....	....
1438.	.....	1	L	..	60	60	18	16	.....	16	....	....	....	....	1	Y	Y
1439.	P 1	.....	L	..	60	60	5	5	.....	5	....	....	....	....	1	..	..
1340.	3	.....	O	R	60	60	100	80	20	100	....	....	....	....	....	....	....
1341.	.....	P 1	L	..	60	60	7	7	.....	7	....	....	....	....	1	Y	Y
1442.	2	.....	O	..	60	60	7	5	.....	5	....	....	....	1	1	..	..
1443.	8	.....	O	..	60	60	25	6	.....	6	....	....	....	....	1	....	....
1444.	1	.....	L	..	60	60	40	20	5	25	....	....	....	....	1	Y	Y
1445.	5	.....	O	..	60	60	15	7	.....	7	....	....	....	1	1	....	....
1446.	2	P 1	O	..	60	60	60	59	1	60	[illegible]	....	1	....	2	....	....
1447.	1	.....	O	..	.....	.....	10	8	.....	8	....	....	....	....	....	....	....

VILAS COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pans guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric. Gas
1408.	S	N	.....	.....	.....	.....	Y	Y	.....	G	35	....	5	2	500	....	....
1409.	O	..	.....	.....	.....	.....	N	..	Y	G	50	....	1	2	110	....	....

CLARK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pans guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric. Gas
1410.	I	N	.....	.....	.....	.....	Y	Y	.....	F	40	....	2	2	200	....	....
1411.	I	..	.....	.....	.....	.....	..	....	.....	....	52	....	....	....	....	....	....
1412.	S	..	.....	.....	.....	.....	N	Y	.....	G	40	....	2	2	150	....	....

DANE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pans guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric. Gas
1413.	.....	.....	.....	.....	.....	.....	Y	.....	.....	....	52	....	2	1	15	....	....
1414.	O	N	.....	....	.....	Y	..	Y	Y	G	52	....	....	....	....	....	....
1415.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1416.	S	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1417.	O	..	.....	.....	.....	.....	N	..	.....	G	.....	....	1	1	10	....	....
1418.	O	..	1	Y	B	Y	Y	..	Y	G	52	....	....	....	5	....	3
1419.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	90	....	....
1420.	S	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	1	20	....	....
1421.	S	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....
1422.	O	..	1	Y	B	Y	Y	..	Y	G	52	....	2	2	22	....	....
1423.	O	..	1	..	T	..	..	..	..	G	52	....	1	1	30	....	....
1424.	O	.....	.....	.....	.....	.....	..	..	.....	G	52	....	1	2	33	....	....
1425.	I	N	.....	.....	.....	.....	N	..	Y	G	52	....	1	1	12	....	....
1426.	.....	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	5	....	....
1427.	O	..	3	Y	S	Y	.....	..	.....	G	50	....	3	2	300	....	....
1428.	O	..	.....	.....	.....	.....	Y	..	.....	G	50	....	....	....	....	....	....
1429.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1430.	S	..	.....	.....	.....	.....	..	..	.....	G	.....	....	....	....	....	....	10
1431.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	1	24	....	....
1432.	O	..	.....	.....	.....	.....	..	N	.....	G	.....	....	....	....	....	....	30
1433.	O	..	.....	.....	.....	.....	..	Y	.....	.....	52	....	2	2	35	....	....
1434.	O	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....
1435.	I	..	.....	.....	.....	.....	Y	..	Y	G	52	....	....	....	....	....	....
1436.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	3	250	....	....
1437.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	4	3	940	....	....
1438.	O	..	1	Y	B	Y	..	..	.....	G	52	....	....	....	....	....	....
1439.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1440.	S	..	.....	.....	.....	.....	..	..	Y	G	52	....	1	....	....	....	75
1441.	I	.....	.....	.....	.....	.....	..	....	.....	G	.....	....	....	....	....	....	3
1442.	I	..	.....	.....	.....	.....	..	Y	.....	G	50	....	....	....	....	....	....
1443.	.....	.....	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	30	....	....
1444.	O	Y	1	Y	B	Y	..	..	Y	G	52	....	....	....	....	....	10
1445.	.....	.....	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	20	....	....
1446.	.....	.....	.....	.....	.....	.....	..	..	.....	....	52	....	1	1	40	....	....
1447.	.....	.....	.....	.....	.....	.....	..	Y	.....	G	50	....	....	....	....	....	....

MADISON.

Running number.	BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
1448.	5	.....	O	I	60	60	20	5	.....	5	.....	...	....	....	1	Y	Y
1449.	.....	P 1	L	R	60	60	6	6	.....	6	.....	...	....	....	....	..	..
1450.	P 1	.....	L	..	60	60	10	7	3	10	1	...	....	....	....	....	....
1451.	.....	P 1	L	..	53	53	15	12	2	14	.....	...	1	1	1	Y	Y
1452.	3	.....	O	..	60	60	20	7	1	8	.....	...	....	....	2	..	..
1453.	1	.....	L	..	60	60	6	3	.....	3	.....	...	....	....	....	....	....
1454.	4	.....	O	..	60	60	15	11	.....	11	.....	...	....	....	2	Y	Y

MANAWA.

1455.	P 1	.....	L	R	60	60	3	2	1	3	.....	....	....	....	....	....	....
1456.	2	1	O	..	60	60	4	3	.....	3	.....	....	....	....	2	Y	Y
1457.	4	.....	O	I	60	60	65	35	.....	35	2	....	....	....	....	....	....

MANITOWOC.

1458.	2	.....	O	R	60	60	25	16	.....	16	1	...	....	....	1	....	....
1459.	P 1	.....	L	..	60	60	8	6	.....	6	1	....	....	1	1	Y	Y
1460.	6	.....	O	..	60	48	150	4	.....	4	.....	....	....	....	2	..	..
1461.	1	.....	O	..	60	60	5	1	.....	1	.....	....	....	....	1	..	..
1462.	3	.....	O	..	60	60	20	4	8	12	2	....	....	....	1	..	..
1463.	2	.....	O	..	60	60	20	11	.....	11	....	....	....	1	....	..	..
1464.	3	.....	O	..	60	60	5	2	.....	2	....	....	....	1	1	..	..
1465.	3	.....	O	..	60	60	13	13	.....	13	....	....	....	....	1	..	..
1466.	6	.....	O	..	144	144	90	45	45	90	2	....	....	....	2	..	..
1467.	7	.....	O	..	60	60	30	25	.....	25	....	....	....	1	1	..	..
1468.	2	.....	O	..	60	60	100	75	.....	75	....	....	....	....	....	....	....
1469.	1	.....	O	..	72	72	5	5	.....	5	....	....	....	....	1	Y	Y
1470.	6	.....	O	..	144	144	30	27	3	30	[illegible]	....	....	2	1	..	..
1471.	1	.....	O	I	144	144	4	4	.....	4	....	....	....	....	....	....	....
1472.	1	.....	O	R	60	60	5	5	.....	5	....	....	....	....	1	Y	Y
1473.	3	1	O	..	60	60	170	170	.....	170	1	....	1	....	....	..	..
1474.	3	.....	O	..	60	60	30	30	.....	30	....	....	....	....	....	....	....
1475.	1	1	O	..	60	30	7	6	.....	6	....	....	....	....	1	Y	Y
1476.	P 1	.....	L	..	60	60	12	2	5	7	....	....	....	....	....	....	....
1477.	3	.....	O	..	60	60	10	8	.....	8	....	....	....	....	1	Y	Y
1478.	5	.....	O	..	60	60	25	25	.....	25	....	....	....	....	3	..	..
1479.	2	.....	O	..	60	60	6	6	.....	6	....	....	....	....	1	..	..
1480.	3	3	O	R	60	60	70	70	.....	70	....	....	1	....	1	..	..
1481.	2	1	O	R	60	60	14	14	.....	14	....	....	....	....	2	..	..
1482.	3	.....	O	..	60	60	6	5	.....	5	....	....	....	....	1	..	..
1483.	7	.....	O	..	59	59	80	59	.....	59	....	....	....	....	3	..	..
1484.	P 1	.....	L	..	60	60	7	1	6	7	....	....	....	....	1	..	..
1485.	2	.....	O	..	60	60	7	7	.....	7	1	....	....	....	1	..	..
1486.	.....	2	O	..	60	60	16	2	.....	2	....	....	1	....	1	..	..
1487.	3	.....	O	..	60	30	8	3	.....	3	....	....	....	....	1	..	..

DANE COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1448.	O	N	....	....	....	....	N	..	....	G	40	....	1	1	20	....	....
1449.	I	..	....	....	....	....	Y	..	....	G	....	....	....	....	....	....	....
1450.	I	..	....	....	....	....	..	..	Y	G	52	....	....	....	....	....	....
1451.	I	..	....	....	....	....	..	..	..	G	52	....	1	1	10	....	....
1452.	O	..	....	....	....	....	..	..	....	G	36	....	....	....	....	....	5
1453.	....	....	....	....	....	....	..	..	....	G	50	....	....	....	....	....	....
1454.	O	N	....	....	....	....	..	....	....	G	52	....	....	....	....	....	14

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers	Number of engines.	Steam.	Water.	Electric, Gas
1455.	I	N	....	....	....	....	Y	Y	....	G	52	....	....	....	....	....	....
1456.	I	..	....	....	....	....	..	..	....	G	52	1	1	1	10	60	....
1457.	I	..	....	....	....	....	N	..	....	....	25	....	1	1	45	150	....

MANITOWOC COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers	Number of engines.	Steam.	Water.	Electric, Gas
1458.	I	N	....	....	....	....	Y	Y	....	G	52	....	1	1	40	....	....
1459.	O	..	....	....	....	....	....	..	....	G	52	....	....	....	HP	....	....
1460.	S	..	....	....	....	....	Y	....	....	G	40	....	2	4	120	....	....
1461.	I	..	....	....	....	....	..	....	....	F	52	....	1	1	15	....	....
1462.	I	..	....	....	....	....	..	Y	Y	G	52	....	1	1	25	....	....
1463.	I	..	....	....	....	....	..	..	....	G	52	....	1	1	10	....	....
1464.	S	..	....	....	....	....	..	....	....	G	....	....	1	1	24	....	....
1465.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	15	....	....
1466.	I	..	2	Y	B	Y	..	Y	Y	G	32	....	2	1	40	....	....
1467.	S	..	1	Y	B	..	N	..	....	G	....	....	1	1	80	....	....
1468.	I	....	....	....	....	....	Y	....	....	G	52	....	1	1	95	....	....
1469.	I	N	....	....	....	....	..	....	....	G	52	....	3	1	150	....	....
1470.	I	..	....	....	....	....	..	....	....	F	52	....	1	1	40	....	....
1471.	I	....	....	....	....	....	....	....	....	....	16	....	....	....	65	....	....
1472.	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	3½	....	....
1473.	S	..	2	Y	D	Y	..	Y	....	G	52	....	3	2	240	....	....
1474.	O	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
1475.	I	..	....	....	....	....	..	....	....	G	26	....	....	....	80	....	....
1476.	I	..	....	....	....	....	..	Y	....	G	....	....	1	1	8	....	....
1477.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	15	....	....
1478.	I	..	....	....	....	....	Y	....	....	G	52	....	1	1	25	....	....
1479.	I	..	1	Y	B	Y	..	....	....	F	52	....	1	1	20	....	....
1480.	I	..	....	....	....	....	..	....	....	G	52	....	3	3	140	....	....
1481.	I	..	1	Y	D	Y	..	Y	....	G	52	....	1	1	25	....	....
1482.	I	..	....	....	....	....	....	....	....	....	52	....	1	1	17	....	....
1483.	I	..	1	Y	B	Y	Y	Y	....	G	52	....	2	1	150	....	....
1484.	I	..	....	....	....	....	..	..	Y	G	52	....	1	1	6	....	....
1485.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	40	....	....
1486.	I	..	1	Y	B	Y	..	Y	....	G	52	....	....	....	HP	....	....
1487.	I	..	....	....	....	....	..	....	....	F	13	....	1	1	24	....	....

MARATHON.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside	Inside	Openings guarded.	Have hand rails.
1488.	2	....	O	I	66	66	20	30	....	30	....	....	....	....	....	....	....
1849.	2	....	O	R	66	66	50	35	....	35	....	....	....	....	1	....	....
1490.	2	....	O	..	60	60	5	4	....	4	....	....	....	....	1	....	....
1491.	1	....	O	..	66	66	15	15	....	15	....	....	....	....	....	....	....
1492.	1	....	O	I	66	66	25	....	....	....	....	....	....	....	....	....	....
1493.	4	....	O	..	60	60	5	5	....	5	....	....	....	....	2	....	....
1494.	2	....	O	..	60	60	10	5	....	5	1	....	....	....	....	....	....
MARINETTE.																	
1495.	7	....	O	R	48	48	131	30	....	30	2	....	....	....	1	Y	Y
1496.	P 2	....	L	..	60	60	8	4	4	8	....	....	....	....	2	..	..
1497.	1	6	O	..	60	60	186	186	....	186	....	....	....	1	2	..	..
1498.	1	....	L	..	60	60	13	13	....	13	4	....	....	....	1	..	..
1499.	3	....	O	..	60	60	14	14	....	14	2	....	....	....	1	..	..
1500.	5	....	O	..	60	60	28	28	....	28	....	....	....	....	2	..	..
1501.	4	1	O	..	60	60	125	125	....	125	....	....	1	1	1	..	..
1502.	P 1	....	L	..	60	60	8	3	2	5	....	....	....	....	1	..	..
1503.	....	1	O	..	144	144	12	12	....	12	....	....	....	....	1	..	..
1504.	3	....	O	..	72	72	5	5	....	5	....	....	....	....	....	....	....
1505.	7	....	O	..	60	60	198	198	....	198	....	....	....	....	2	Y	Y
1506.	4	....	O	..	60	60	75	75	....	75	2	....	....	1	1	..	..
1507.	4	1	O	..	144	144	31	26	....	26	....	....	....	....	2	..	..
1508.	8	1	O	..	144	144	146	131	15	146	....	....	....	2	2	..	..
1509.	2	....	O	..	60	60	35	31	....	31	....	....	....	....	1	..	..
1510.	4	1	O	..	60	60	160	100	....	100	....	....	....	....	1	..	..
1511.	3	....	O	..	60	60	150	73	....	73	....	....	....	1	1	..	..
1512.	P 1	....	L	..	60	60	11	7	4	11	....	....	....	....	1	..	..
1513.	3	....	O	..	60	60	15	3	6	9	....	....	....	....	1	....	....
1514.	4	....	O	..	60	60	150	150	....	150	....	....	....	....	1	Y	Y
1515.	4	....	O	..	60	60	155	125	....	125	....	....	....	....	2	..	..
1516.	3	....	O	..	60	60	90	90	....	90	....	....	....	....	1	..	..
1517.	P 1	....	L	..	60	60	5	2	3	5	2	....	....	....	....	....	....
1518.	1	....	L	..	60	60	10	1	9	10	....	....	....	....	1	....	....
1519.	4	1	O	..	60	60	260	70	....	70	2	....	....	....	2	Y	Y
MARION.																	
1520.	1	....	O	R	60	60	2	2	....	2	....	....	....	....	1	Y	Y
1521.	1	....	O	..	60	60	15	10	....	10	....	....	....	....	....	....	....
1522.	1	....	O	I	60	60	10	10	....	10	....	....	....	....	....	....	....
1523.	2	....	O	R	60	60	10	3	....	3	....	....	....	....	1	N	N
1524.	1	....	O	..	60	60	10	10	....	10	....	....	....	....	....	....	....
1525.	2	....	O	..	60	60	10	6	....	6	....	....	....	....	1	Y	Y
MARSHFIELD.																	
1526.	1	....	O	R	60	60	15	8	....	8	....	....	....	....	....	....	....
1527.	6	....	O	..	60	60	27	27	....	27	....	....	....	1	1	Y	Y
1528.	1	....	O	..	60	60	5	3	2	5	....	....	....	....	....	....	....
1529.	2	....	O	..	60	60	6	3	....	3	....	....	....	1	1	Y	Y
1530.	10	....	O	..	60	60	28	24	4	28	1	....	....	....	....	..	..

MARATHON COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1488.	O	N	.....	.....	....	.....	Y	.....	.....	G	16	....	3	1	60	....	....
1489.	S	..	.....	.....	....	.....	..	.....	.....	G	26	....	2	1	70	....	....
1490.	S	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	45	....	....
1491.	O	..	.....	.....	....	.....	..	.....	.....	G	16	....	1	1	50	....	....
1492.	S	..	.....	.....	....	.....	.....	.....	.....	G	.....	....	2	1	65	....	....
1493.	I	N	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	35	....	....
1494.	.....	..	.....	.....	....	.....	..	.....	.....	G	21	....	1	1	65	....	....

OCONTO COUNTY.

1495.	I	N	.....	.....	....	.....	Y	Y	.....	G	52	....	2	2	75	....	....
1496.	O	..	.....	.....	....	.....	..	.....	Y	G	52	....	....	1	....	....	5
1497.	O	..	.....	.....	....	.....	..	.....	.....	G	30	....	5	2	285	....	....
1498.	O	..	.....	.....	....	.....	..	.....	.....	G	26	....	....	....	50	....	....
1499.	O	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	20	....	....
1500.	I	..	2	Y	D	Y	..	Y	.....	G	52	2	1	1	75	....	....
1501.	I	..	.....	.....	....	.....	..	.....	.....	G	30	....	7	2	340	....	....
1502.	I	..	.....	.....	....	.....	..	Y	Y	G	52	....	....	1	3	....	....
1503.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	....	160	....
1504.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	5	2	600	....	....
1505.	I	..	.....	.....	....	.....	..	.....	.....	G	30	1	7	3	275	....	....
1506.	I	..	1	Y	D	Y	..	.....	.....	G	52	....	1	1	125	....	....
1507.	I	..	1	..	B	..	..	.....	.....	F	52	....	2	1	25	200	....
1508.	S	..	2	..	B	..	..	Y	Y	G	52	....	7	2	250	200	....
1509.	S	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	65	....	....
1510.	S	..	.....	.....	....	.....	..	.....	.....	G	30	1	11	1	176	....	....
1511.	S	..	.....	.....	....	.....	..	.....	.....	G	39	....	6	1	600	....	....
1512.	I	..	.....	.....	....	.....	..	Y	Y	G	52	....	....	E 1	....	....	5
1513.	.....	..	.....	.....	....	.....	.....	..	..	G	52	....	1	1	15	....	....
1514.	S	..	.....	.....	....	.....	Y	.....	.....	G	30	1	5	2	600	....	....
1515.	I	..	.....	.....	....	.....	..	.....	.....	G	26	....	7	3	330	....	....
1516.	S	..	.....	.....	....	.....	..	.....	.....	G	26	....	4	1	250	....	....
1517.	I	..	.....	.....	....	.....	..	Y	.....	G	52	....	....	E 1	....	....	3
1518.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	13	....	....
1519.	I	..	.....	.....	....	.....	..	.....	.....	G	26	....	8	2	250	....	....

SHAWANO COUNTY.

1520.	I	N	.....	.....	....	.....	Y	.....	.....	G	52	....	....	....	....	40	....
1521.	S	..	.....	.....	....	.....	..	.....	.....	G	12	....	1	1	40	35	....
1522.	.....	..	.....	.....	....	.....	..	.....	.....	G	4	....	1	1	25	....	....
1523.	S	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	35	....	....
1524.	.....	..	.....	.....	....	.....	..	.....	.....	G	5	....	1	1	20	....	....
1525.	I	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	1	1	35	....

WOOD COUNTY.

1526.	.....	N	.....	.....	....	.....	..	Y	.....	G	52	....	1	1	6	....	....
1527.	O	.....	.....	.....	....	.....	N	..	.....	G	52	1	1	1	35	....	....
1528.	O	.....	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	....	....	....
1529.	O	..	1	Y	B	Y	..	Y	.....	G	52	....	1	1	25	....	....
1530.	S	..	.....	.....	....	.....	..	..	Y	G	52	....	1	1	50	....	....

MARSHFIELD.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1531.	7	1	O	R	60	60	13	13	.....	13	.....	...	....	1	2	Y	Y
1532.	3	1	O	..	60	60	50	50	.....	50	10	...	....	....	2	..	..
1533.	1	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	....	....	....
1534.	4	.....	O	..	120	120	34	30	.....	30	4	...	....	....	....	....	....
1535.	5	.....	O	..	144	144	6	6	.....	6	.....	...	....	....	....	....	....
1536.	1	.....	L	..	60	60	6	3	.....	3	1	...	....	....	....	....	....
1537.	7	.....	O	..	60	60	80	75	.....	75	10	...	....	....	1	Y	Y
1538.	2	.....	O	..	60	60	8	8	.....	8	.....	...	....	....	....	....	..
1539.	3	.....	O	..	60	60	60	60	.....	60	.....	...	....	....	....	....	....
1540.	.....	2	O	..	60	60	5	5	.....	5	.....	...	....	2	2	Y	Y
1541.	4	.....	O	..	60	60	60	55	.....	55	.....	...	....	2	1	..	..
1542.	6	.....	O	..	60	66	175	175	.....	175	45	...	....	2	2	..	..
1543.	7	.....	O	..	60	60	44	44	.....	44	.....	...	....	....	....	....	....

MAZOMANIA.

1544.	2	1	O	I	60	....	8	.....	.....	.....	.....	...	....	....	2	Y	Y
1545.	4	.....	O	R	60	60	5	5	.....	5	1	...	....	....	1	..	..
1546.	3	.....	O	I	60	....	21	.....	.....	.....	.....	...	....	....	1	..	..
1547.	1	.....	O	R	60	60	2	2	.....	2	.....	...	....	....	....	....	....

MASON.

1548.	15	.....	O	R	60	60	146	146	.....	146	5	...	....	3	2	Y	Y

MATTOON.

1549.	4	.....	O	R	66	66	25	13	.....	13	2	...	....	....	....	....	....
1550.	2	.....	O	..	66	66	40	40	.....	40	6	...	....	....	1	Y	Y
1551.	3	.....	O	..	66	66	27	27	.....	27	.....	...	....	....	2	..	..
1552.	2	.....	O	..	66	66	23	23	.....	23	4	...	....	....	1	..	..
1553.	5	.....	O	..	60	60	263	250	.....	250	6	...	....	3	4	..	..

MAUSTON.

1554.	.....	2	O	R	66	144	8	7	.....	7	.....	...	....	....	2	Y	Y

MAYVILLE.

1555.	5	.....	O	R	60	60	25	4	5	9	3	...	....	....	....	....	....
1556.	1	3	O	..	60	60	17	15	.....	15	.....	...	....	....	2	Y	....
1557.	1	.....	O	..	60	60	12	7	.....	7	.....	...	....	....	1	..	Y
1558.	1	.....	O	..	70	70	90	90	.....	90	.....	...	....	....	....	....	....

MEDFORD.

1559.	P 1	.....	L	R	60	60	4	3	1	4	.....	...	....	....	....	....	....
1560.	6	.....	O	..	60	60	50	20	.....	20	5	...	....	....	1	....	....
1561.	P 1	.....	L	..	60	60	3	2	1	3	1	...	....	....	....	....	....
1562.	1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	....	....	....
1563.	1	.....	O	..	60	60	8	8	.....	8	.....	...	....	....	....	....	....
1564.	5	.....	O	..	60	60	157	157	.....	157	.....	...	....	3	4	Y	Y

WOOD COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1531.	S	N	.....	.....	....	.....	N	.....	.....	G	52	....	2	1	15	....	....
1532.	S	..	1	Y	B	Y	Y	Y	.....	G	26	....	1	1	80	....	....
1533.	S	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	6	....	....
1534.	S	..	.....	.....	....	.....	..	..	.....	G	52	....	2	1	45	....	....
1535.	O	..	.....	.....	....	.....	..	..	.....	G	52	....	2	2	160	....	....
1536.	O	..	.....	.....	....	.....	..	N	.....	G	52	....	1	1	3	....	....
1537.	S	..	.....	.....	....	.....	..	Y	.....	G	....	....	2	2	190	....	....
1538.	I	....	.....	.....	....	.....	..	..	.....	G	52	....	8	3	400	....	....
1539.	S	N	.....	.....	....	.....	..	..	.....	G	52	....	....	....	....	....	....
1540.	O	..	.....	.....	....	.....	..	..	.....	G	50	....	....	....	....	....	....
1541.	S	..	.....	.....	....	.....	..	..	.....	G	48	....	4	1	150	....	....
1542.	O	..	3	Y	D	Y	..	..	.....	G	52	....	4	1	260	....	....
1543.	S	..	.....	.....	....	.....	..	..	.....	G	40	....	1	1	60	....	....

DANE COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1544.	I	N	.....	.....	....	.....	Y	.....	.....	....	12	....	1	.1	55	75	....
1545.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	12	....	....
1546.	O	..	.....	.....	....	.....	..	Y	.....	G	4	....	1	1	35	....	....
1547.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	50	....	....

BAYFIELD COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1548.	O	N	.....	.....	....	.....	.....	Y	.....	.....	52	....	12	5	675	....	....

SHAWANO COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1549.	S	N	.....	.....	...	.....	.....	Y	.....	G	32	....	2	1	80	....	....
1550.	S	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	30	....	....
1551.	S	..	.....	.....	....	.....	.....	..	.....	G	52	....	3	1	160	....	....
1552.	I	..	1	Y	B	N	Y	.....	.....	G	52	1	2	2	65	....	....
1553.	S	..	1	..	B	..	N	Y	.....	G	50	....	5	3	250	....	....

JUNEAU COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1554.	I	.....	.....	.....	....	.....	Y	Y	.....	G	52	....	1	1	80	100	....

DODGE COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1555.	I	N	.....	.....	....	Y	Y	Y	Y	G	25	....	1	1	60	....	....
1556.	I	..	.....	.....	....	.....	..	..	.....	G	43	....	1	1	60	....	....
1557.	S	..	.....	.....	....	Y	..	..	.....	G	51	....	1	1	16	....	....
1558.	.....	.....	.....	.....	.....	..	.....	.....	.....	G	30	....	7	2	800	....	....

TAYLOR COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1559.	.....	N	.....	.....	....	Y	.....	.....	.....	G	52	....	....	....	HP	....	....
1560.	.....	.....	.....	.....	.....	.....	Y	Y	.....	G	40	....	3	2	100	....	....
1561.	.....	N	.....	.....	.....	.....	.....	.....	.....	....	52	....	....	....	....	....	....
1562.	.....	..	.....	.....	.....	.....	.....	.....	.....	....	52	....	....	....	....	....	....
1563.	.....	..	.....	.....	.....	.....	.....	Y	.....	G	48	....	1	1	20	....	....
1564.	.....	..	.....	.....	.....	.....	Y	..	.....	G	52	....	6	6	300	....	....

MEDINA.

Running number.		Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
									Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1565.		2	.....	O	R	60	60	10	7	.....	7	.....	...	....	....	....	....	....
1566.		1	.....	O	R	60	60	5	2	.....	2	.....	...	....	1	....	Y	Y
1567.		3	.....	O	..	60	60	4	3	.....	3	.....	...	....	....	1	..	..

MELLEN.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1568.		6	.....	O	R	60	60	150	124	.....	124	.....	...	....	1	4	Y	Y

MENASHA.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1569.		2	2	O	I	144	....	.....	.....	.....	.....	.....	...	....	2	1	Y	Y
1570.		5	1	O	R	144	144	123	97	26	123	.....	...	....	1	5	..	..
1571.		1	.....	O	I	66	....	12	.....	.....	.....	.....	...	....	....	....	....	....
1572.		5	.....	O	R	144	144	62	20	6	26	.....	...	....	....	2	Y	Y
1573.		2	.....	O	..	60	60	10	6	.....	6	.....	...	....	....	....	....	....
1574.		3	.....	O	..	60	60	18	14	.....	14	.....	...	....	....	2	Y	Y
1575.		2	.....	O	I	60	....	5	1	.....	1	.....	...	....	1	1	..	..
1576.	P	1	.....	L	R	60	60	16	10	6	16	.....	...	....	....	....	....	....
1577.		4	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	1	Y	Y
1578.		1	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	....	....	....
1579.		8	1	O	..	60	60	65	20	.....	29	2	...	....	....	3	Y	Y
1580.		2	6	O	..	60	60	900	900	.....	900	185	...	....	....	....	..	..
1581.		2	1	O	I	60	....	80	30	40	70	8	...	1	....	....	..	..
1582.		2	.....	O	R	60	60	10	5	.....	5	.....	...	....	1	1	..	..
1583.		4	2	O	..	144	144	52	48	7	55	.....	...	....	....	2	..	..
1584.		3	3	O	..	60	60	13	13	.....	13	.....	...	....	....	2	..	..
1585.		6	1	O	..	144	144	65	31	30	61	.....	...	....	....	2	..	..
1586.	P	1	.....	L	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....

MENOMONIE.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1587.		1	.....	O	R	60	59	9	9	.....	9	5	...	....	....	1	....	Y
1588.		1	.....	O	..	60	60	5	4	.....	4	.....	...	....	....	1	Y	..
1589.		5	.....	O	..	60	60	14	14	.....	14	1	...	....	1	2	....	..
1590.		29	1	O	..	60	60	586	586	.....	586	.....	...	....	4	10	Y	..
1591.		3	.....	O	..	60	60	8	5	.....	5	.....	...	....	....	1	..	..
1592.	P	2	.....	L	..	60	60	10	2	8	10	4	...	....	....	1	..	..
1593.		4	.....	O	..	60	60	60	60	.....	60	13	...	....	....	....	....	....
1594.		1	.....	O	..	60	60	4	4	.....	4	.....	...	....	....	1	Y	Y
1595.	P	2	.....	L	I	60	....	20	.....	.....	.....	3	...	....	....	....	....	....
1596.		1	.....	L	R	60	60	6	3	3	6	.....	...	....	....	1	....	Y
1597.		8	.....	O	..	60	60	63	63	.....	63	1	...	....	....	....	....	....

MERRILL.

Running number.		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1598.		1	.....	O	R	60	60	5	3	2	5	.....	...	....	1	1	Y	Y
1599.		3	.....	O	..	60	60	175	175	.....	175	10	...	....	....	2	..	..
1600.		2	1	O	..	60	60	5	4	.....	4	.....	...	....	....	2	..	..
1601.		1	.....	O	..	60	60	6	1	3	4	.....	...	....	....	....	....	....
1602.		1	.....	O	..	60	60	9	5	.....	5	.....	...	....	....	....	....	....
1603.		6	.....	O	..	60	60	175	130	1	181	.....	...	....	1	1	Y	Y

OUTAGAMIE COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1565.	O	N	....	....	....	....	Y	....	....	G	26	....	1	1	60	....	....
1566.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	HP	....	....
1567.	I	..	....	....	....	....	N	....	....	G	52	....	1	1	10	....	....

ASHLAND COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1568.	O	N	....	....	....	....	Y	....		G	12	....	8	2	400	....	....

WINNEBAGO COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1569.	I	N	1	Y	B	Y	Y	Y	Y	G	....	....	2	2	300	....	....
1570.	S	..	2	..	D	..	..	..	..	G	52	....	7	3	800	200	....
1571.	....	....	....	....	....	....	..	....	....	....	21	....	1	1	35	....	....
1572.	O	N	2	Y	T	Y	..	....	....	....	45	....	3	2	200	200	....
1573.	I	..	....	....	....	....	..	....	....	F	52	....	1	1	12	25	....
1574.	I	..	....	....	....	....	..	Y	....	G	46	....	1	1	107	....	....
1575.	O	..	....	....	....	....	..	....	....	G	26	....	1	1	10	....	....
1576.	I	..	....	....	....	....	..	Y	Y	G	52	....	....	G 1	6	....	....
1577.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	12	....	....
1578.	I	..	....	....	....	....	..	Y	....	G	52	....	....	G 1	3	....	....
1579.	S	..	1	Y	B	Y	..	..	....	G	52	....	1	1	75	....	....
1580.	S	..	....	....	....	....	..	..	Y	F	50	....	5	3	800	1000	....
1581.	I	..	....	....	....	....	..	..	..	G	42	....	1	1	50	50	....
1582.	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	30	....
1583.	S	..	3	Y	T	Y	..	Y	....	F	52	2	3	1	450	....	....
1584.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	65	....	....
1585.	I	..	2	Y	D	Y	..	Y	....	G	52	....	2	1	223	150	....
1586.	I	..	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....

DUNN COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1587.	....	N	....	....	....	....	Y	....	....	G	50	....	....	....	....	....	....
1588.	I	..	....	....	....	....	..	....	....	G	52	....	....	....	....	3	....
1589.	S	..	....	....	....	....	..	....	....	G	52	....	1	1	30	....	....
1590.	S	..	....	....	....	....	....	....	....	G	16	....	3	6	1475	1500	....
1591.	S	N	....	....	....	....	Y	....	....	G	50	....	1	1	10	....	....
1592.	I	..	....	....	....	....	..	Y	Y	G	50	....	1	1	2	....	....
1593.	....	..	....	....	....	....	....	..	....	G	11	....	1	1	80	....	....
1594.	I	..	....	....	....	....	Y	..	....	G	52	....	1	1	3½	....	....
1595.	O	..	....	....	....	....	..	....	....	G	11	....	1	1	40	....	....
1596.	....	..	....	....	....	....	..	....	....	G	....	....	1	....	....	....	....
1597.	....	..	....	....	....	....	..	....	....	G	25	....	1	1	80	....	....

LINCOLN COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1598.	I	N	....	....	....	....	Y	Y	....	G	52	....	....	1	....	....	G 8
1599.	I	....	....	....	....	....	..	..	....	G	35	....	12	8	380	....	....
1600.	I	N	....	....	....	....	..	..	Y	G	30	....	1	1	25	....	....
1601.	....	..	....	....	....	....	..	..	....	G	52	....	1	....	....	....	....
1602.	I	..	....	....	....	....	....	..	....	G	37	....	1	1	25	....	....
1603.	....	..	....	....	....	....	....	N	....	G	37	....	9	3	525	....	....

MERRILLAN.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total	Between 14 and 18 years.	Under 14 years		Outside.	Inside	Openings guarded.	Have hand rails.
1604.																	
1605.	1		O	R	60	60	170	168		168					1	Y	Y
1606.	1		O	..	60	60	4	4		4					1	..	..
1607.	7		O	..	60	72	367	367		367	60	6			5	..	..
1608.	7		O	..	60	60	45	40		40					1	..	..
1609.	8	1	O	..	60	72	300	133	1	134	5			1	2	..	..

MERRILLAN.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails.
1610.	1		O	R	60	60	5	5		5							
1611.	2		O	..	60	60	18	5		5					1	Y	Y
1612.	4		O	I	60		20										

MILTON JUNCTION.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails.
1613.	2		O	R	60	60	2	2		2							
1614.	1		O	..	60	48	10	2	1	3				1	1	Y	Y
1615.	1		O	I	60		6									..	..

MINERAL POINT.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails.
1616.	3		O	R	60	66	10	10		10	2				1		Y
1617.	2		O	..	60	60	2	2		2					1	Y	..
1618.	1		O	..	66	66	2	2		2							
1619. P	1		L	..	60	60	5	2	3	5							
1620.	4		O	I	60		45						1		1	Y	Y
1621. P	1		L	R	60	60	5	3		3					1	..	..
1622.	1	1	O	..	60	60	30	12	18	30	6				1	..	..
1623.	12	2	L	..	63	63	103	100	3	103					1	..	..
1624.	3	2	L	..	60	60	10	6		6					2	..	..

MONROE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total	Between 14 and 18 years.	Under 14 years	Number of fire escapes.	Outside.	Inside	Openings guarded.	Have hand rails.
1625.	1		L	R	60	60	3	3		3	1						
1626.	1		L	..	60	60	5	4		4					1	Y	Y
1627. P	1		L	..	60	60	5	3	2	5	3				1	..	..
1628.	1	1	O	..	60	60	30	30		30			1		2	..	..
1629.	1		O	I	60	60	10	5		5							
1630.	3	1	O	R	60	60	10	10		10					2	Y	Y
1631.	1		O	..	72	72	6	3		3							
1632.	2		L	..	60	60	7	5		5					2	Y	Y
1633.	5		O	..	60	60	30	20		20				2	1	..	..
1634.	2		O	..	60	60	5	3		3					2	..	..
1635. P	1		L	..	60	60	5	5		5					1	..	..
1636.	1		L	..	60	60	10	6		6							
1637.	1		L	..	60	60	5	3	2	5							
1638.	1		L	..	60	60	7	6		6							
1639.	2		L	..	60	60	10	7		7				1	1	Y	Y

WOOD COUNTY—Continued.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pan guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas
1604.	.....	.....	.....	.....	....	.....	.....	.....	.....	....	.....	....	....	....	....	....	....
1605.	.....	N	.....	.....	....	.....	.....	Y	Y	G	32	....	4	1	175	700	....
1606.	I	..	.....	.....	....	.....	.....	..	..	G	50	....	....	....	....	100	....
1607.	S	..	2	Y	T	Y	Y	..	.....	G	49	....	9	4	950	....	....
1608.	S	..	.....	.....	....	.....	..	..	Y	G	49	1	2	3	300	....	....
1609.	S	..	.....	.....	....	.....	..	..	.....	....	25	N	9	5	697	....	....

JACKSON COUNTY.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pan guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas
1610.	I	N	.....	.....	....	.....	Y	Y	...	G	52	....	1	1	7	....	....
1611.	I	..	.....	.....	....	.....	.....	..	Y	G	32	1	1	1	45	....	....
1612.	O	..	.....	.....	....	.....	Y	.....	.....	....	32	....	....	....	....	40	....

ROCK COUNTY.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pan guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas
1613.	I	N	.....	.....	....	.....	.....	Y	.....	G	52	....	1	1	10	....	....
1614.	I	..	.....	.....	....	.....	.....	..	Y	G	42	....	1	1	6	....	....
1615.	S	..	.....	.....	....	.....	.....	..	.....	G	.....	....	1	1	30	....	....

IOWA COUNTY.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pan guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas
1616.	S	N	.....	.....	....	.....	Y	.....	.....	F	32	....	1	1	40	....	....
1617.	O	..	.....	.....	....	.....	..	.....	.....	G	35	....	1	1	14	....	....
1618.	.....	..	.....	.....	....	.....	..	.....	.....	G	.....	....	2	1	125	....	....
1619.	I	..	.....	.....	....	.....	.....	Y	Y	G	52	....	....	....	HP	....	....
1620.	S	..	.....	.....	....	.....	Y	..	..	G	45	....	2	1	400	....	....
1621.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	1	2	....	....
1622.	S	..	1	Y	B	Y	..	Y	Y	G	32	....	1	1	20	30	....
1623.	.....	..	1	..	B	..	..	..	.....	G	20	....	5	1	250	....	....
1624.	O	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	12	....	....

GREEN COUNTY.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pan guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas
1625.	I	N	.....	.....	....	.....	Y	.....	.....	G	.....	....	1	1	4	....	....
1626.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	....	100	....
1627.	S	..	.....	.....	....	.....	..	Y	.....	G	52	....	....	....	....	2	....
1628.	I	..	1	Y	B	Y	..	..	.....	G	40	....	1	1	30	....	....
1629.	.....	.....	.....	.....	....	.....	.....	.....	.....	....	12	....	....	....	HP	....	....
1630.	I	N	1	Y	D	..	..	..	.....	G	52	....	2	2	60	....	....
1631.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	2	1	150	....	....
1632.	I	..	.....	.....	....	.....	..	.....	.....	F	52	....	1	1	6	....	....
1633.	S	..	.....	.....	....	.....	..	Y	.....	G	52	....	1	1	50	....	....
1634.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	70	....	....
1635.	I	..	1	Y	....	.....	..	Y	.....	G	52	....	....	....	....	2	....
1636.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	....	....	HP	....	....
1637.	I	..	.....	.....	....	Y	.....	.....	.....	G	52	....	1	1	....	....	....
1638.	I	..	.....	.....	....	.....	Y	Y	.....	G	.....	....	....	....	....	....	....
1639.	I	..	1	Y	D	Y	..	..	.....	G	52	....	2	1	25	....	....

MONTICELLO.

	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
1640.	2	.....	O	I	60	60	5	4	.....	4	.....	....	....	1	1	Y	Y
1641.	2	.....	O	R	60	60	5	2	.....	2	.....	....	....	....	1	..	..
1642.	2	.....	O	..	60	60	16	4	1	5	.....	....	....	1	1	..	..
MORRIS.																	
1643.	7	.....	O	R	66	66	65	65	.....	65	.....	....	....	....	1	Y	Y
MOSINEE.																	
1644.	3	.....	O	R	60	60	110	75	1	76	5	...	....	....	....	....	....
1645.	P 1	.....	L	..	.....	.....	.....	.....	.....	.....	.....	...	....	....	....	....	....
MUSKEG.																	
1646.	2	.....	O	I	60	.....	12	1	.....	1	.....	...	....	....	....	....	....
MERCER.																	
1647.	3	.....	O	R	60	60	25	25	.....	25	.....	...	....	1	1	....	....
MORRIE.																	
1648.	2	.....	O	R	66	66	30	30	.....	30	.....	....	....	....	1	Y	Y
1649.	3	.....	O	I	60	60	5	5	.....	5	.....	...	....	....	....	....	....
NASH.																	
1650.	6	.....	O	R	66	66	110	110	.....	110	.....	...	....	....	....	....	....
NECEDAH.																	
1651.	1	2	O	R	144	144	15	15	.....	15	.....	....	....	....	2	Y	Y
1652.	5	.....	O	..	60	60	.....	.....	.....	.....	.....	....	....	....	....	....	....
1653.	3	.....	O	..	60	60	135	132	5	136	.....	....	....	....	1	Y	Y
NEENAH.																	
1654.	2	.....	O	R	60	60	10	6	.....	6	.....	...	....	....	....	....	....
1655.	4	3	O	..	60	60	65	60	.....	60	4	....	....	1	4	Y	Y
1656.	2	2	O	..	144	144	31	25	6	31	3	....	....	....	2	..	..
1657.	2	.....	O	..	144	144	20	17	3	20	3	....	....	....	1	..	..
1658.	3	1	O	..	144	144	75	50	25	75	10	....	1	2	3	..	..
1659.	1	1	O	..	144	144	13	13	.....	13	.....	....	....	....	2	..	..
1660.	.....	1	O	..	60	60	48	22	19	41	4	....	1	....	1	..	..
1661.	P 1	.....	O	..	60	60	6	3	.....	3	.....	...	....	....	....	....	....
1662.	P 1	.....	L	..	60	60	10	3	3	6	.....	...	....	....	1	Y	Y
1663.	P 2	.....	L	..	84	84	6	6	.....	6	.....	...	....	1	1	..	..

GREEN COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1640.	I	N	....	....	....	....	Y	....	....	G	26	....	1	1	35	....	....
1641.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	25	50	....
1642.	I	..	....	....	....	....	..	....	....	G	32	....	1	....	....	40	....
SHAWANO COUNTY.																	
1643.	S	N	....	....	....	....	Y	....	....	G	20	....	3	1	75	45	....
MARATHON COUNTY.																	
1644.	....	N	....	....	....	....	....	Y	....	....	....	1	6	1	....	....	....
1645.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BAYFIELD COUNTY.																	
1646.	....	N	....	....	....	....	....	Y	....	G	40	....	1	1	....	....	....
IRON COUNTY.																	
1647.	O	N	....	....	....	....	....	....	....	G	40	....	3	1	150	....	....
MARATHON COUNTY.																	
1648.	....	N	....	....	....	....	Y	....	....	G	6	....	2	1	40	....	....
1649.	S	..	....	....	....	....	..	....	....	G	3	....	1	1	45	....	....
BUFFALO COUNTY.																	
1650.	I	N	....	....	....	....	Y	Y	....	G	35	....	1	1	50	....	....
JUNEAU COUNTY.																	
1651.	I	N	....	....	....	....	Y	Y	....	G	33	....	1	1	65	75	....
1652.	....	....	....	....	....	....	N	..	....	G	50	....	1	1	150	....	....
1653.	S	N	1	....	....	....	..	..	....	G	50	....	7	2	325	....	....
WINNEBAGO COUNTY.																	
1654.	I	N	....	....	....	....	Y	....	....	F	43	....	1	1	35	....	....
1655.	I	..	1	Y	S	Y	..	Y	....	G	52	....	1	1	50	....	....
1656.	I	..	1	..	D	..	..	..	Y	G	52	....	2	1	150	300	....
1657.	I	..	1	..	D	..	..	..	....	G	52	....	1	1	80	150	....
1658.	I	..	3	..	S	..	..	..	Y	G	52	....	4	2	450	300	....
1659.	O	..	....	....	....	....	..	..	....	G	52	....	1	1	125	200	....
1660.	I	..	....	....	....	....	..	..	Y	G	47	....	1	1	35	15	....
1661.	I	..	....	....	....	....	..	..	....	G	52	....	1	1	3	....	....
1662.	I	..	....	....	....	....	..	..	Y	G	52	....	....	....	5	....	....
1663.	I	..	....	....	....	....	..	....	....	G	52	....	2	1	50	300	....

NEENAH.

Running number.		BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES.						Number of fire escapes.	STAIRWAYS.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
									Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
1664.		5	.....	O	R	144	144	75	50	25	75	.....	...	....	....	2	Y	Y
1665.		3	1	O	..	60	60	18	12	.....	12	.....	....	....	....	2	..	..
1666.	P	1	.....	L	..	60	60	5	2	3	5	.....	....	....	1	1	..	..
1667.	P	1	.....	O	..	60	60	8	8	.....	8	.....	....	....	....	1	..	..
1668.		5	.....	O	..	144	144	75	60	15	75	.....	....	....	1	1	..	..
NEILLSVILLE.																		
1669.		9	.....	O	R	60	60	18	18	.....	18	1	....	....	1	1	Y	Y
1670.		5	.....	O	..	60	60	4	4	.....	4	.....	....	....	1	3	..	..
1671.		4	.....	O	..	60	60	35	20	.....	20	2	....	....	....	....	....	....
1672.		4	1	O	I	60	.....	100	10	.....	10	15	....	....	2	3	Y	Y
1673.		.....	1	O	R	60	60	5	4	.....	4	.....	....	....	....	2	..	..
1674.		1	.....	O	..	60	60	5	3	.....	3	.....	....	....	....	1	..	..
1675.		4	.....	O	..	60	60	6	5	.....	5	....	....	....	1	1	..	..
NEKOOSA.																		
1676.		.....	.....	O	R	144	144	300	225	9	234	6	...	....	1	....	Y	Y
NEW LONDON.																		
1677.		9	.....	O	R	60	60	100	85	.....	85	18	...	....	....	2	Y	Y
1678.		2	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	1	..	..
1679.		4	.....	O	I	60	....	25	.....	.....	.....	.....	...	....	....	1	..	..
1680.		2	3	O	R	60	60	9	9	.....	9	.....	...	....	....	2	..	..
1681.		2	.....	O	..	66	66	50	32	.....	32	.....	...	....	....	1	..	..
1682.		1	.....	O	R	60	60	6	5	.....	5	.....	...	....	....	....	....	....
1683.		2	.....	O	..	60	60	5	1	.....	1	.....	...	....	....	1	Y	Y
1684.		8	.....	O	..	60	60	70	66	.....	66	9	...	....	....	....	..	..
1685.		1	.....	O	..	112	112	2	2	.....	2	.....	...	....	....	....	....	....
1686.		3	.....	O	..	60	60	7	5	.....	5	.....	...	....	....	....	....	....
1687.		1	.....	L	..	60	60	5	3	2	5	.....	...	....	....	....	....	....
1688.	P	1	.....	L	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....
1689.		1	.....	L	..	66	60	4	3	1	4	.....	...	....	....	....	....	....
1690.		3	.....	O	..	66	66	40	22	.....	22	3	...	....	....	1	Y	Y
1691.		7	.....	O	..	60	60	45	30	.....	30	4	...	....	....	2	..	..
1692.	P	1	.....	O	..	60	60	10	5	.....	5	.....	...	....	....	....	....	....
NEW RICHMOND.																		
1693.		5	1	O	R	60	60	17	16	1	17	.....	...	1	2	3	Y	Y
1694.		6	.....	O	..	60	60	9	9	.....	9	.....	...	....	1	2	..	..
1695.		5	.....	O	..	60	60	60	20	.....	20	2	...	....	....	2	..	..

WINNEBAGO COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1664.	I	N	1	Y	D	Y	Y	Y	Y	G	52	....	1	1	125	600	....
1665.	O	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	75	....	....
1666.	I	..	.....	.....	....	.....	..	Y	.....	G	52	....	1	1	5	....	....
1667.	O	..	.....	.....	....	.....	..	..	.....	G	52	....	1	2	....	8	....
1668.	I	..	2	Y	B	Y	..	..	.....	B	52	....	3	3	375	375	....

CLARK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1669.	S	N	.....	.....	....	.....	Y	Y	.....	G	35	....	1	1	35	....	....
1670.	.....	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	30	....	....
1671.	I	..	.....	.....	....	.....	..	..	.....	G	.....	....	2	2	70	....	....
1672.	I	..	.....	.....	....	.....	..	..	.....	G	37	....	2	2	350	....	....
1673.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	85	....	....
1674.	I	N	.....	.....	....	.....	..	..	.....	....	36	....	....	....	40	....	....
1675.	I	..	.....	.....	....	.....	..	..	.....	....	52	....	1	1	18	....	....

WOOD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1676.	I	N	2	Y	A	Y	Y	Y	Y	G	52	....	6	3	526	4300	....

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1677.	S	N	1	Y	A	Y	Y	.....	.....	G	52	....	3	3	200	....	....
1678.	I	..	.....	.....	....	.....	..	.....	.....	....	52	....	1	1	50	....	....
1679.	I	..	.....	.....	....	.....	..	.....	.....	G	32	....	2	2	100	....	....
1680.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	12	....	....
1681.	S	..	.....	.....	....	.....	..	.....	.....	G	12	....	4	2	100	....	....
1682.	O	N	.....	.....	....	.....	Y	.....	.....	G	52	....	....	1	25	....	....
1683.	I	..	.....	.....	....	.....	..	.....	.....	F	52	....	1	1	15	....	....
1684.	O	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	1	35	....	....
1685.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	175	....	....
1686.	I	..	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	12	....	....
1687.	I	..	.....	.....	....	.....	..	Y	Y	G	52	....	1	1	5	....	....
1688.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
1689.	I	..	.....	.....	....	.....	Y	..	.....	G	52	....	1	....	2	....	2
1690.	S	..	.....	.....	....	.....	..	.....	.....	G	10	....	1	1	65	....	....
1691.	I	..	1	Y	G	Y	N	.....	.....	G	46	....	1	1	65	....	....
1692.	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....

ST. CROIX COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1693.	I	N	.....	.....	....	.....	Y	Y	.....	G	52	....	2	1	80	50	....
1694.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	40	....	....
1695.	I	..	.....	.....	....	.....	..	..	.....	....	50	1	5	2	240	....	....

OAKFIELD.

Running number.		Buildings.		Plant.		Hours per week.		Employees.						Number of fire escapes.	Stairways.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails.
									Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
1696.		2	.....	O	I	60	....	4	.....	.....	.....	.....	...	....	1	1	Y	Y
OCONTO.																		
1697.		2	.....	O	R	72	72	6	2	.....	2	.....	...	....	1	....	....	....
1698.		1	.....	O	I	60	.....	55	.....	.....	.....	.....	...	....	....	....	....	....
1699.		1	.....	O	R	60	60	10	2	.....	2	.....	...	....	....	1	Y	Y
1700.	P	1	.....	L	..	60	60	5	3	.....	3	.....	...	....	....	1	..	..
1701.		2	.....	O	I	60	....	37	.....	.....	.....	.....	...	....	....	1	..	..
1702.		10	1	O	R	60	60	198	32	.....	32	.....	...	1	3	2	..	..
1703.		6	.....	O	..	60	60	100	56	.....	56	.....	...	....	....	1	..	..
1704.		1	1	O	..	60	60	5	2	1	3	.....	...	....	....	1	..	..
1705.		3	.....	O	..	60	60	10	7	.....	7	.....	...	....	....	1	..	..
1706.		3	.....	O	..	60	60	.....	26	.....	26	.....	...	....	....	....	....	....
1707.		4	1	O	..	60	60	65	44	.....	44	.....	...	1	1	2	Y	Y
1708.	P	2	.....	L	..	60	60	7	4	3	7	.....	...	....	....	....	....	....
1709.		1	.....	O	..	60	48	7	7	.....	7	.....	...	....	....	....	....	....
1710.		4	.....	O	I	60	.....	40	.....	.....	.....	.....	...	....	....	2	Y	Y
OCONTO FALLS.																		
1711.		2	.....	O	R	144	144	155	147	8	155	5	...	....	....	4	Y	Y
1712.		4	.....	O	..	60	60	20	5	.....	5	.....	...	....	....	....	....	....
ODANAH.																		
1713.		4	.....	O	R	120	22	192	192	.....	192	2	...	....	3	1	Y	Y
ONALASKA.																		
1714.		4	.....	O	R	60	60	115	105	10	115	.....	...	....	....	2	....	Y
1715.		5	.....	O	..	60	60	6	5	.....	5	.....	...	....	....	6	Y	..
OSCEOLA.																		
1716.		4	1	O	R	144	144	22	20	.....	20	.....	...	....	....	2	Y	Y
1717.		1	.....	L	..	60	60	3	2	.....	2	.....	...	....	....	....	....	....
1718.		1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	....	....	....
OSHKOSH.																		
1719.		1	.....	L	R	60	60	16	12	4	16	2	...	....	....	1	Y	Y
1720.		1	.....	O	..	60	60	15	7	5	12	.....	...	....	....	1	..	..
1721.		3	2	O	..	60	60	200	140	1	141	14	...	4	1	2	..	..
1722.		1	.....	O	I	48	8	6	6	.....	6	.....	...	....	....	....	....	....
1723.	P	1	.....	L	R	48	48	8	7	1	8	2	...	....	1	1	Y	Y
1724.		1	2	O	I	.....	.....	35	4	.....	4	.....	...	....	....	2	Y	Y
1725.		.....	4	O	R	48	48	300	180	56	236	5	...	3	....	3	..	..
1726.		5	.....	O	..	60	60	30	30	.....	30	6	...	....	....	2	..	..
1727.		2	.....	L	..	60	48	24	15	2	17	1	...	....	1	1	..	..
1728.		4	.....	O	..	60	48	75	15	.....	15	.....	...	....	....	....	....	....

FOND DU LAC COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1696.	I	N	.....	.....	.....	.....	N	Y	.....	F	30	....	1	1	20	....	....

OCONTO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1697.	S	N	.....	.....	.....	.....	Y	.....	.....	G	52	....	2	1	225	....	....
1698.	S	..	.....	.....	.....	.....	..	.....	.....	G	....	....	....	....	....	....	45
1699.	I	..	.....	.....	.....	.....	..	.....	.....	G	16	....	....	....	....	....	10
1700.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	....	1	3	....	....
1701.	S	..	.....	.....	.....	.....	..	.....	.....	G	....	....	3	1	125	....	....
1702.	O	..	.....	.....	.....	.....	..	.....	.....	G	52	....	5	1	475	....	....
1703.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	2	3	110	....	....
1704.	S	..	.....	.....	.....	.....	..	.....	.....	G	3	....	1	1	100	....	....
1705.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	12	....	....
1706.	S	..	.....	.....	.....	.....	..	.....	.....	G	52	....	2	3	225	....	40
1707.	S	..	.....	.....	.....	.....	..	.....	.....	G	26	....	9	2	600	....	....
1708.	I	..	.....	.....	.....	.....	..	Y	Y	G	52	....	....	1	3	....	....
1709.	I	..	.....	.....	.....	.....	..	.....	.....	G	26	....	1	1	30	....	....
1710.	I	..	.....	.....	.....	.....	..	.....	.....	G	32	....	4	2	75	....	....

OCONTO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1711.	N	N	2	Y	T	Y	Y	Y	Y	G	50	....	6	2	....	....	....
1712.	.....	.....	.....	.....	.....	.....	N	Y	.....	G	16	....	1	1	75	....	....

ASHLAND COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1713.	O	N	.....	.....	.....	.....	N	Y	.....	G	22	2	4	1	250	....	....

LA CROSSE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1714.	.....	N	.....	.....	.....	.....	N	Y	.....	G	26	....	8	3	150	....	....
1715.	I	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	12	....	....

POLK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1716.	I	N	.....	.....	.....	.....	N	Y	.....	G	52	....	1	....	....	85	....
1717.	I	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....
1718.	I	..	.....	.....	.....	.....	.....	..	.....	G	52	....	....	....	....	....	....

WINNEBAGO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1719.	I	N	.....	.....	.....	.....	N	Y	Y	G	52	....	....	1	....	....	G 7
1720.	I	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	25	....	....
1721.	O	..	2	Y	T	Y	..	..	Y	G	45	....	2	2	185	....	....
1722.	I	..	.....	.....	.....	.....	..	..	.....	G	40	....	1	1	12	....	....
1723.	I	..	.....	.....	.....	.....	.....	N	N	G	52	....	....	....	....	....	....
1724.	S	N	.....	.....	.....	.....	Y	Y	.....	G	47	....	1	1	66	....	....
1725.	I	..	3	Y	D	Y	.....	..	Y	G	36	1	4	2	185	....	....
1726.	S	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	100	....	....
1727.	I	..	.....	.....	.....	.....	..	..	Y	G	50	....	1	1	30	....	....
1728.	O	..	.....	.....	.....	.....	..	..	.....	G	39	....	1	2	20	....	....

OSHKOSH.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1729.	2	1	O	R	47	47	200	70	.....	70	13	...	4	....	2	Y	Y
1730.	3	.....	O	..	108	108	60	60	.....	60	.....	...	....	....	....	....	....
1731.	3	.....	O	..	60	60	125	100	7	107	5	...	....	....	2	Y	Y
1732.	1	.....	O	..	60	60	50	50	.....	50	.....	...	....	....	2	..	..
1733.	2	1	O	I	60	....	30	15	.....	15	.....	...	....	....	1	..	..
1734.	7	.....	O	R	60	54	60	24	.....	24	.....	...	....	....	....	....	....
1735.	.....	1	O	..	48	48	20	15	5	20	2	...	....	2	1	Y	Y
1736.	8	.....	O	..	60	60	285	60	158	218	87	...	....	1	3	..	..
1737.	1	1	O	I	....	....	7	5	.....	5	.....	...	....	1	1	..	..
1738.	P 1	.....	L	R	60	54	20	3	15	18	3	...	....	....	....	....	....
1739.	P 1	.....	L	..	60	58	10	9	.....	9	.....	...	....	....	....	....	....
1740.	5	.....	O	..	60	48	100	75	.....	75	.....	...	....	1	4	Y	Y
1741.	1	.....	O	I	60	....	....	....	.....	....	.....	...	....	1	1	..	..
1742.	1	.....	O	R	60	54	12	7	.....	7	1	...	....	....	....	....	....
1743.	2	.....	O	..	60	50	165	162	3	165	32	...	....	....	4	Y	Y
1744.	2	.....	O	..	60	54	60	15	.....	15	.....	...	....	....	....	....	....
1745.	1	.....	L	..	60	60	21	19	2	21	27	...	....	....	2	Y	Y
1746.	2	.....	O	..	60	60	38	38	.....	38	.....	...	....	2	1	....	Y
1747.	3	.....	O	..	60	48	11	6	4	10	.....	...	....	....	1	Y	..
1748.	1	1	O	..	60	60	8	7	.....	7	.....	...	....	....	1	....	....
1749.	2	.....	O	I	60	....	26	....	.....	....	.....	...	4	2	2	Y	Y
1750.	3	.....	O	R	60	48	225	165	5	170	25	...	4	1	2	..	..
1751.	.....	P 1	O	..	64	64	8	4	1	5	.....	...	....	1	1	..	..
1752.	P 1	.....	L	..	60	60	20	4	12	16	.....	...	....	....	1	..	..
1753.	2	.....	L	..	60	54	35	9	7	16	.....	...	....	....	2	N	N
1754.	7	2	O	R	60	54	250	200	4	204	20	...	5	1	2	Y	Y
1755.	.....	1	O	..	60	60	20	12	.....	12	.....	...	....	....	2	..	..
1756.	2	.....	L	I	60	....	9	1	.....	1	.....	...	....	....	1	..	..
1757.	10	.....	O	R	60	60	20	20	.....	20	.....	...	....	....	7	..	..
1758.	P 1	.....	L	..	59	59	65	7	38	45	21	...	....	1	1	..	..
1759.	2	.....	O	..	70	70	17	15	1	16	.....	...	....	....	1	..	..
1760.	1	3	O	..	60	60	140	89	5	94	5	...	3	1	2	..	..
1761.	2	.....	O	..	168	168	10	9	.....	9	.....	...	....	....	....	....	....
1762.	3	.....	O	..	60	60	25	5	.....	5	.....	...	....	....	1	Y	Y
1763.	1	.....	O	..	60	54	20	11	1	12	.....	...	....	....	1	..	..
1764.	1	.....	L	..	60	60	3	3	.....	3	.....	...	....	....	1	..	..
1765.	P 1	.....	L	..	60	60	25	3	15	18	.....	...	....	....	1	....	..
1766.	P 1	.....	L	..	60	60	12	10	1	11	.....	...	....	1	1	N	N
1767.	5	.....	O	..	168	168	10	10	.....	10	.....	...	....	....	1	Y	Y
1768.	P 1	.....	L	..	48	48	10	10	2	12	3	...	....	1	1	..	..
1769.	.....	.....	O	..	60	60	700	700	21	721	.....	...	4	1	1	..	N
1770.	1	.....	O	..	60	60	60	60	.....	60	20	5	....	....	2	....	Y
1771.	2	.....	O	..	60	60	106	106	.....	106	20	...	....	....	2	Y	..
1772.	P 1	.....	L	..	60	60	8	2	6	8	1	...	....	....	....	....	....
1773.	2	.....	O	..	60	48	8	5	.....	5	.....	...	....	....	....	....	....
1774.	2	.....	O	..	60	60	290	150	4	154	7	...	....	2	....	Y	Y
1775.	4	.....	O	..	60	60	10	4	.....	4	.....	...	....	1	1	..	..
1776.	1	.....	L	..	60	60	18	10	.....	10	.....	...	....	....	1	..	..
1777.	1	1	O	..	48	48	15	7	.....	7	.....	...	....	1	1	..	..
1778.	2	2	O	..	60	60	95	71	24	95	29	...	....	1	4	..	..

WINNEBAGO COUNTY—Continued.

Running number	DOORS.		ELEVATORS.				Machinery vats and pan guarded.	CLOSETS.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	HORSE-POWER		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1729.	S	N	2	Y	D	Y	Y	Y	Y	G	39	....	2	1	350	....	....
1730.	S	..	....	....	....	....	..	..	....	G	52	....	2	2	60	....	....
1731.	O	..	1	Y	D	Y	..	..	Y	G	52	....	1	1	140	....	....
1732.	S	..	....	....	....	....	N	..	....	....	20	....	1	2	200	....	....
1733.	O	N	1	Y	....	....	Y	..	....	G	50	....	....	....	....	....	....
1734.	....	....	....	....	....	....	..	....	....	G	50	....	1	2	40	....	....
1735.	I	N	1	Y	D	Y	..	Y	Y	G	50	....	....	....	....	....	....
1736.	O	N	3	Y	A	..	..	..	..	G	50	....	4	4	300	....	....
1737.	I	..	....	....	....	....	..	..	....	G	52	....	2	1	100	....	....
1738.	I	..	....	....	....	....	..	..	N	F	52	....	1	1	14	....	....
1739.	I	..	....	....	....	....	..	..	..	G	52	....	1	1	10	....	....
1740.	O	..	2	Y	D	Y	..	..	....	G	42	....	2	1	200	....	....
1741.	O	..	....	....	....	....	..	..	Y	G	11	....	4	1	150	....	....
1742.	O	..	....	....	....	....	..	..	....	G	52	....	1	1	10	....	....
1743.	S	..	1	Y	A	Y	..	..	Y	G	48	....	2	1	250	....	....
1744.	....	..	....	....	....	....	..	..	....	G	48	....	1	2	50	....	....
1745.	O	..	1	Y	D	Y	..	..	Y	G	52	....	1	1	20	....	....
1746.	....	..	....	....	....	....	N	..	....	G	23	....	3	1	150	....	....
1747.	O	..	....	....	....	....	....	..	Y	G	52	....	1	1	25	....	....
1748.	....	....	....	....	....	....	Y	..	..	G	52	....	2	1	60	....	....
1749.	S	N	....	....	....	....	Y	Y	Y	G	20	....	4	1	70	....	....
1750.	O	..	2	Y	A	Y	..	..	..	G	49	1	3	3	375	....	....
1751.	O	..	....	....	....	....	..	..	..	G	52	....	....	....	....	....	....
1752.	I	..	1	Y	D	Y	..	..	..	G	52	....	1	1	15	....	....
1753.	O	..	....	....	....	....	N	..	..	G	52	....	1	1	75	....	....
1754.	O	..	2	Y	S	Y	Y	..	..	G	44	....	3	3	550	....	....
1755.	O	..	1	Y	A	..	..	..	....	G	52	....	....	....	....	....	....
1756.	O	..	....	....	....	....	..	..	Y	G	26	....	1	1	25	....	....
1757.	I	..	....	....	....	....	..	..	....	G	52	....	3	2	26	....	....
1758.	O	..	....	....	....	....	....	..	Y	G	46	....	....	....	....	....	....
1759.	O	..	....	....	....	....	Y	..	..	G	52	....	4	4	800	....	....
1760.	I	..	2	Y	D	Y	..	..	..	G	45	....	2	1	150	....	....
1761.	....	..	....	....	....	....	..	..	....	G	52	....	2	2	120	....	....
1762.	S	..	....	....	....	....	..	..	....	G	52	....	1	1	12	....	....
1763.	I	..	....	....	....	....	..	..	Y	G	52	....	1	1	30	....	....
1764.	I	..	....	....	....	....	..	..	....	F	52	....	1	1	30	....	....
1765.	....	..	1	Y	D	Y	..	..	Y	G	....	....	....	....	....	....	....
1766.	I	..	....	....	....	....	..	..	..	G	52	....	1	1	35	....	....
1767.	O	..	....	....	....	....	..	..	....	G	52	....	4	5	....	....	....
1768.	I	..	....	....	....	....	....	..	Y	G	49	....	....	....	....	....	....
1769.	S	Y	4	Y	T	Y	N	..	..	G	48	....	2	5	1000	....	....
1770.	S	N	....	....	....	....	Y	..	....	G	6	....	1	1	150	....	....
1771.	S	..	....	....	....	....	..	..	....	G	22	....	7	1	400	....	....
1772.	I	..	....	....	....	....	..	..	N	G	52	....	1	1	10	....	....
1773.	....	....	....	....	....	....	..	..	....	G	44	....	1	1	10	....	....
1774.	O	N	1	Y	T	Y	..	..	Y	G	50	....	11	2	450	....	....
1775.	I	..	....	....	....	....	..	..	....	G	52	....	1	1	20	....	....
1776.	O	..	1	Y	A	Y	..	..	....	G	52	....	1	1	20	....	....
1777.	I	..	....	....	....	....	..	..	....	G	42	....	2	1	100	....	....
1778.	I	..	3	Y	D	Y	N	..	Y	G	47	....	1	1	75	....	....

OSHKOSH.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1779.	1	.....	O	R	60	60	30	10	20	30	3	...	....	....	1	Y	Y
1780.	1	1	O	..	60	55	40	40	.....	40	.....	...	1	....	2	..	..
1781.	.....	1	O	..	48	48	35	15	.....	15	.....	...	....	....	3	..	..
1782.	.....	1	O	..	48	48	80	20	2	22	.....	...	....	....	2	..	..
1783.	3	.....	O	..	.....	48	22	16	1	17	.....	...	....	....	1	..	..
1784.	P 1	.....	L	..	60	60	10	3	7	10	.....	...	....	1	1	..	N
1785.	3	.....	O	..	60	60	24	18	.....	18	1	...	....	1	1	..	..
1786.	1	.....	L	..	60	60	31	31	.....	31	9	...	....	1	1	..	Y
1787.	5	1	O	..	60	30	8	8	.....	8	.....	...	....	1	....	....	Y
1788.	.....	.....	L	..	54	54	30	3	27	30	6	...	....	....	1	Y	..
1789.	5	.....	O	..	60	60	200	200	.....	200	78	...	....	2	3	..	..
1790.	.....	1	O	..	4	48	12	9	.....	9	.....	...	....	....	2	..	N
1791.	P 1	.....	L	..	60	48	12	4	.....	4	.....	...	....	1	....	..	..
1792.	.....	.....	O	..	60	60	60	20	16	36	4	...	....	....	....	..	..
1793.	1	.....	L	..	4	48	7	6	1	7	2	...	....	....	....	....	....

PARK FALLS.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1794.	1	.....	O	R	144	144	93	83	10	93	5	...	....	....	....	....	...

PASKIN LAKE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1795.	2	.....	O	R	60	60	26	5	.....	5	.....	...	....	....	....	....	...

PESHTIGO.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1796.	2	.....	O	R	60	48	5	1	.....	1	.....	...	....	....	....	....	...
1797.	1	.....	L	..	60	60	16	16	.....	16	.....	...	....	....	....	....	...
1798.	7	.....	O	..	60	60	125	125	.....	125	.....	...	....	....	2	Y	Y

PESHTIGO HARBOR.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1799.	3	1	O	I	.....	.....	150	.....	.....	.....	.....	...	2	1	1	Y	Y

PETERSBURG.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1800.	2	.....	O	I	60	.....	8	.....	.....	.....	.....	...	....	....	....	....	....
1801.	4	.....	O	I	60	.....	8	.....	.....	.....	.....	...	....	....	1	Y	Y

PHILLIPS.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1802.	10	.....	O	R	60	60	300	138	.....	138	15	...	....	1	3	Y	Y
1803.	.....	P 1	L	..	60	60	2	2	.....	2	.....	...	....	....	....	....	....
1804.	P 1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	....	....	....
1805.	7	.....	O	..	144	144	110	110	.....	110	.....	...	....	....	2	Y	Y

PLATTEVILLE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1806.	P 1	.....	L	R	60	60	5	4	.....	4	.....	...	....	....	....	....	....
1807.	P 1	.....	L	..	60	60	5	4	.....	4	.....	...	....	1	....	Y	Y
1808.	1	.....	O	..	60	60	8	5	.....	5	.....	...	....	....	1	..	..
1809.	1	1	O	..	60	60	5	2	.....	2	.....	...	....	....	1	..	..
1810.	16	.....	O	..	60	60	30	33	.....	33	.....	...	....	....	7	..	..

WINNEBAGO COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1779.	I	N	.....	.....	.....	.....	N	Y	Y	G	44	....	1	1	75	....	....
1780.	O	..	1	Y	D	Y	Y	..	..	G	50	....	1	1	50	....	....
1781.	O	..	1	Y	S	..	..	..	..	G	50	....	1	1	25	....	....
1782.	O	..	1	Y	....	..	..	..	..	G	32	....	2	1	20	....	....
1783.	S	..	.....	.....	.....	.....	..	..	..	G	52	....	1	1	30	....	....
1784.	O	..	.....	.....	.....	.....	..	..	..	G	2	....	1	1	35	....	....
1785.	O	..	.....	.....	.....	.....	N	..	.....	G	52	....	....	....	....	....	....
1786.	I	..	1	Y	A	Y	Y	..	Y	G	52	....	1	1	15	....	....
1787.	S	..	.....	.....	.....	.....	.....	..	.....	G	52	....	1	1	75	....	....
1788.	O	..	.....	.....	.....	.....	Y	..	Y	G	52	....	1	1	75	....	....
1789.	.....	..	2	Y	D	Y	..	..	.....	G	44	....	3	3	500	....	....
1790.	I	..	1	Y	D	..	..	..	.....	G	.....	....	....	....	....	....	....
1791.	O	..	.....	.....	.....	.....	.....	..	.....	G	30	....	....	....	....	....	....
1792.	O	..	.....	.....	.....	.....	Y	..	N	G	.....	....	3	2	50	....	....
1793.	.....	.....	.....	.....	.....	.....	.....	..	Y	G	52	....	....	....	....	....	....

PRICE COUNTY.

1794.	S	N	.....	.....	....	.....	.....	Y	Y	....	52	....	4	2	500	....	....

BARRON COUNTY.

1795.	I	N	.....	.....	....	.....	N	Y	.....	G	52	....	1	1	75	....	....

MARINETTE COUNTY.

1796.	I	N	.....	.....	....	.....	Y	.....	.....	G	26	....	1	1	45	....	....
1797.	O	N	.....	.....	....	.....	..	.....	.....	....	20	....	....	....	100	....	....
1798.	S	N	.....	.....	....	.....	..	Y	.....	G	30	....	5	1	550	500	....

MARINETTE COUNTY.

1799.	I	N	.....	.....	....	.....	.....	.....	.....	....	.....	....	8	2	225	....	....

CRAWFORD COUNTY.

1800.	O	.....	.....	.....	....	.....	Y	.....	.....	G	10	....	1	1	30	....	....
1801.	I	N	.....	.....	....	.....	.....	.....	.....	G	.....	....	1	1	50	....	....

PRICE COUNTY.

1802.	I	N	.....	.....	....	.....	Y	Y	.....	G	32	....	14	2	500	....	....
1803.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	2	....
1804.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	G 3
1805.	I	..	.....	.....	....	.....	N	..	.....	G	52	....	9	3	100	....	....

GRANT COUNTY.

1806.	I	N	.....	.....	....	.....	.....	Y	.....	G	52	....	....	....	....	....	....
1807.	I	..	.....	.....	....	.....	Y	.....	.....	G	52	....	....	1	2	....	....
1808.	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1809.	I	..	.....	.....	....	.....	Y	.....	.....	G	36	....	1	1	30	....	....
1810.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	2	3	75	....	....

PLATTEVILLE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1811.	P 1	.....	L	R	60	60	5	3	.....	3	.....	...	....	....	1	Y	Y
1812.	2	.....	O	..	60	60	7	5	.....	5	.....	...	....	....	1	....	....
1813.	4	1	O	..	60	60	10	7	.....	7	.....	...	....	....	1	Y	Y
1814.	2	.....	O	I	60	60	50	17	33	50	18	...	....	....	1	..	..
1815.	2	.....	O	R	84	84	2	2	.....	2	.....	...	....	....	....	....	....
1816.	2	.....	O	I	60	....	6	.....	.....	.....	.....	...	....	....	....	....	....
1817.	P 1	.....	L	R	60	60	36	15	4	19	1	...	....	....	1	Y	Y
1818.	2	.....	O	..	60	60	6	4	1	5	.....	...	....	....	....	....	....
1819.	2	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	....	....	....
1820.	2	.....	O	..	60	48	5	3	.....	3	.....	...	....	....	1	Y	Y

PLUM CITY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1821	7	.....	O	R	60	60	25	10	.....	10	2	...	....	1	1	Y	N
1822.	2	.....	O	I	.....	....	21	.....	.....	.....	.....	...	....	....	....	....	....

PLYMOUTH.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1823.	3	1	O	R	60	60	8	3	.....	3	.....	...	....	....	3	Y	Y
1824.	2	.....	O	I	60	....	15	.....	.....	.....	.....	...	....	....	1	..	..
1825.	2	.....	O	R	60	60	15	8	.....	8	.....	...	....	....	....	....	....
1826.	2	2	O	..	60	60	85	67	.....	67	8	...	....	....	2	Y	Y
1827.	P 2	.....	O	..	60	60	5	.....	5	5	.....	...	....	....	....	....	....
1828.	.....	P 1	L	..	60	60	5	4	1	5	.....	...	....	....	1	Y	Y
1829.	2	1	O	..	60	60	5	3	.....	3	.....	...	....	....	2	..	..
1830.	1	2	O	I	60	....	60	.....	.....	.....	.....	...	....	....	2	..	..
1831.	5	1	O	R	60	60	8	8	.....	8	.....	...	....	....	2	..	..
1832.	2	2	O	I	60	....	35	.....	.....	.....	.....	...	....	1	2	..	..
1833.	5	.....	O	R	60	60	15	15	.....	15	1	...	....	....	....	....	....

PORCUPINE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1834.	1	.....	O	R	60	60	15	15	.....	15	.....	...	....	....	....	....	....

PORT EDWARDS.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1835.	5	.....	O	R	144	144	190	178	10	188	6	...	....	....	3	Y	Y

PORTER'S MILL.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1836.	12	.....	O	R	60	60	300	250	.....	250	3	2	....	3	5	Y	Y

PORTAGE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1837.	1	.....	L	R	60	54	50	5	32	37	5	...	....	....	2	Y	Y
1838.	.....	1	O	..	60	60	10	7	1	8	.....	...	1	....	1	..	..
1839.	1	.....	L	..	60	60	20	15	5	20	.....	...	....	1	1	..	..
1840.	5	.....	O	..	60	60	36	36	.....	36	.....	...	....	....	....	....	....
1841.	4	.....	O	..	60	60	6	6	.....	6	.....	...	....	1	2	Y	Y

GRANT COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1811.	I	N	.....	.....	....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
1812.	I	..	.....	.....	....	.....	.....	.....	.....	G	40	....	....	....	....	....	....
1813.	I	..	.....	.....	....	.....	Y	Y	.....	G	52	....	1	1	20	....	....
1814.	S	..	.....	.....	....	.....	..	..	Y	G	3	....	1	1	20	....	....
1815.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	2	1	150	....	....
1816.	O	..	.....	.....	....	.....	..	.....	.....	F	26	....	1	1	8	....	....
1817.	I	..	1	Y	B	Y	.....	Y	.....	G	52	....	....	....	....	....	....
1818.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	1	1	6	....	....
1819.	I	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	1	15	....	....
1820.	S	..	.....	.....	....	.....	Y	.....	.....	G	26	....	....	....	....	....	8
PIERCE COUNTY.																	
1821.	S	N	.....	.....	....	.....	N	Y	.....	G	18	....	1	2	75	....	....
1822.	O	N	.....	.....	....	.....	..	..	.....	F	32	....	1	1	50	....	....
SHEBOYGAN COUNTY.																	
1823.	I	N	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	50	90	....
1824.	I	..	.....	.....	....	.....	.....	.....	.....	F	45	....	1	1	15	....	....
1825.	O	..	.....	.....	....	.....	.....	.....	.....	F	.....	....	1	1	12	....	....
1826.	O	..	2	Y	B	Y	Y	Y	.....	G	40	....	2	1	150	....	....
1827.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	6	....	....
1828.	I	..	.....	.....	....	.....	..	.....	Y	G	52	....	....	1	....	....	1
1829.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	6	....	....
1830.	O	..	2	Y	B	Y	..	Y	.....	G	46	....	1	1	100	....	....
1831.	I	..	.....	.....	....	.....	N	.....	.....	G	52	....	1	1	35	....	....
1832.	O	..	.....	.....	....	.....	Y	.....	.....	G	44	....	1	1	65	....	....
1833.	O	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	20	....	....
PEPIN COUNTY.																	
1834.	.....	N	.....	.....	....	.....	N	Y	.....	F	30	....	1	1	25	....	....
WOOD COUNTY.																	
1835.	S	N	2	Y	A	.....	Y	Y	Y	G	.....	....	5	2	500	3800	....
EAU CLAIRE COUNTY.																	
1836.	S	N	.....	.....	....	.....	N	Y	.....	G	24	....	15	8	550	....	....
COLUMBIA COUNTY.																	
1837.	O	N	.....	.....	....	.....	Y	Y	Y	F	49	....	....	1	....	....	E 6
1838.	I	..	1	Y	S	Y	..	..	..	....	50	....	....	....	....	....	....
1839.	I	..	.....	.....	....	.....	.....	..	..	G	50	....	....	....	....	....	....
1840.	O	..	.....	.....	....	.....	.....	..	.....	G	52	....	2	1	20	....	....
1841.	I	..	.....	.....	....	.....	N	..	.....	G	50	....	1	1	15	....	....

PORTAGE.

Running number.		BUILDINGS.		PLANT.		HOURS PER WEEK.		EMPLOYEES						Number of fire escapes.	STAIRWAYS.			
		1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside	Openings guarded.	Have hand rails
									Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1842.		2	.....	O	R	60	60	11	11	.....	11	.....	...	....	....	2	Y	Y
1843.		1	.....	L	..	60	48	30	1	11	12	.....	...	....	1	....	..	..
1844.		1	.....	L	..	60	60	9	6	3	9	.....	...	....	1	1	..	..
1845.		4	.....	O	..	60	60	75	22	52	74	9	...	....	2	5	..	..
1846.		1	.....	L	..	60	60	9	4	5	9	.....	...	....	....	1	..	..
1847.		2	.....	L	..	60	60	50	4	36	40	[illegible]	1	....	....	2	..	..
1848.	P	1	.....	L	..	60	60	12	8	4	12	.....	...	....	1	1	..	..
1849.		3	1	O	..	60	60	12	6	.....	6	.....	...	....	....	1	..	..
PORT WASHINGTON.																		
1850.		5	.....	O	R	60	60	8	8	.....	8	1	...	....	....	3	Y	Y
1851.		4	.....	O	..	60	60	45	45	.....	45	3	...	....	1	2	..	N
1852.		3	.....	O	..	60	60	50	38	.....	38	2	...	....	....	1	N	..
1853.		1	.....	O	..	60	60	10	6	.....	6	.....	...	....	....	....	....	....
1854.		1	.....	O	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....
1855.		2	.....	O	I	60	....	25	.....	.....	.....	.....	...	....	....	1	Y	Y
1856.		1	1	O	R	60	60	25	25	.....	25	.....	...	....	....	1	..	..
1857.	P	1	.....	L	..	60	60	10	1	4	5	.....	...	....	....	....	....	....
1858.		2	.....	O	R	60	60	25	10	.....	10	1	...	....	....	....	....	....
1859.		2	1	O	..	72	72	7	4	.....	4	.....	...	....	....	1	Y	Y
1860.		6	.....	O	..	60	54	65	65	.....	65	.....	...	....	....	1	..	..
1861.		8	4	O	..	60	60	410	365	45	410	5[illegible]	...	1	3	5	..	..
PORT WING.																		
1862.		3	.....	O	R	60	60	45	45	.....	45	.....	...	....	....	....	....	....
POUND.																		
1863.		1	.....	O	R	66	66	14	14	.....	14	.....	...	....	....	....	....	....
PRAIRIE DU CHIEN.																		
1864.		2	.....	O	R	60	60	15	15	.....	15	.....	...	....	....	....	....	....
1865.		1	1	O	..	60	60	10	8	.....	8	.....	...	....	....	2	Y	Y
1866.		3	.....	O	..	60	30	124	12	8	20	[illegible]	...	....	....	....	....	....
1867.		2	.....	O	I	60	.....	12	.....	.....	.....	.....	...	....	....	1	Y	Y
1868.		2	.....	O	R	60	60	2	2	.....	2	.....	...	....	....	....	....	....
1869.	P	1	.....	L	..	60	60	4	4	.....	4	.....	...	....	....	1	Y	Y
1870.		1	.....	O	..	66	66	2	2	.....	2	.....	...	....	....	....	....	....
1871.		5	.....	O	..	60	60	20	20	.....	20	4	...	....	....	2	Y	Y
1872.		1	.....	O	..	60	60	4	3	1	4	.....	...	....	....	1	..	..
1873.		1	.....	L	..	60	60	5	2	.....	2	.....	...	....	....	....	....	....
1874.		2	1	O	..	66	66	38	20	18	38	1	...	....	....	2	Y	Y
1875.		3	1	O	..	60	60	6	5	.....	5	.....	...	....	....	2	..	..
1876.		2	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	1	..	..

COLUMBIA COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1842.	I	N	....	....	....	....	Y	Y	....	G	52	....	1	1	24	....	....
1843.	I	..	....	....	....	....	..	..	N	G	52	....	....	1	8	....	....
1844.	I	..	....	....	....	....	....	..	Y	G	50	....	....	1	....	....	G 3
1845.	I	..	1	Y	T	Y	Y	..	..	F	49	....	1	1	26	....	....
1846.	I	..	....	....	....	....	N	..	..	G	50	....	1	1	8	....	....
1847.	I	..	....	....	....	....	Y	....	....	....	50	....	....	1	....	....	G 4
1848.	I	..	....	....	....	....	..	Y	Y	G	50	....	....	1	....	....	G 4
1849.	I	..	....	....	....	....	N	..	....	G	50	....	1	1	125	....	....

OZAUKEE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1850.	S	N	....	....	...	....	....	....	....	....	52	....	2	3	60	....	....
1851.	I	..	....	....	...	....	Y	Y	....	G	52	....	1	1	50	....	....
1852.	I	..	....	....	...	....	..	....	....	G	52	....	1	1	53	....	....
1853.	....	....	....	....	...	....	..	....	....	....	26	....	1	1	30	....	....
1854.	....	....	....	....	...	....	..	....	....	G	26	....	1	1	12	....	....
1855.	I	N	....	....	....	....	..	....	....	G	42	....	1	1	30	....	....
1856.	I	..	1	Y	B	Y	..	Y	....	G	52	....	1	1	20	....	....
1857.	I	..	....	....	....	....	..	..	....	G	....	....	1	1	8	....	....
1858.	....	....	....	....	....	....	..	....	....	....	....	....	1	1	50	....	....
1859.	I	N	....	....	....	....	..	....	....	G	52	....	1	1	100	....	....
1860.	I	..	1	Y	B	Y	..	....	....	G	52	....	1	1	40	....	....
1861.	O	..	5	Y	B	..	..	Y	Y	G	45	1	4	2	280	....	....

BAYFIELD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1862.	O	N	....	....	....	....	Y	Y	....	G	35	....	2	1	90	....	....

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1863.	....	....	....	....	....	....	....	....	....	....	30	....	....	....	....	....	....

CRAWFORD COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1864.	S	....	....	....	....	....	Y	....	....	G	4	....	1	1	30	....	....
1865.	I	N	....	....	....	....	..	....	....	G	52	....	1	1	100	....	....
1866.	I	..	....	....	....	....	....	....	....	G	16	....	1	1	18	....	....
1867.	I	..	....	....	....	....	....	Y	....	G	....	....	1	1	15	....	....
1868.	I	..	....	....	....	....	N	....	....	G	52	....	1	1	10	....	....
1869.	I	..	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....
1870.	I	..	....	....	....	....	Y	....	....	G	52	....	2	2	150	....	....
1871.	I	..	....	....	....	....	..	Y	....	G	36	....	1	1	25	....	....
1872.	I	..	....	....	....	....	....	..	....	G	52	....	....	1	....	....	2
1873.	....	....	....	....	....	....	Y	....	....	G	52	....	1	1	2	....	....
1874.	I	N	....	....	....	....	..	Y	Y	G	52	....	1	1	75	....	....
1875.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
1876.	I	..	....	....	....	....	..	....	....	G	26	....	1	1	20	8	....

PRENTICE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside	Openings guarded.	Have hand rails.
1877.	2	.....	O	R	60	60	20	16	.....	16	.....	...	....	2	....	Y	....
1878.	4	2	O	..	60	60	90	70	.....	70	.....	...	....	2	4	....	Y

QUINNESEC FALLS.

1879.	3	1	O	R	168	168	125	120	3	123	.....	...	....	....	1	Y	Y

RACINE.

1880.	2	1	O	R	60	60	12	8	.....	8	.....	...	....	3	2	Y	Y
1881.	1	.....	L	..	60	60	200	8	116	124	15	...	....	....	3	..	..
1882.	1	.....	O	..	168	168	10	10	.....	10	.....	...	....	....	....	....	....
1883.	4	.....	O	..	60	60	60	60	.....	60	.....	...	....	....	2	Y	Y
1884.	2	.....	L	..	60	60	20	8	.....	8	1	...	....	....	1	..	..
1885.	3	.....	O	..	60	60	200	183	1	184	35	...	....	....	....	....	....
1886.	6	.....	O	..	55	45	90	49	.....	49	2	...	....	....	3	Y	Y
1887.	2	1	O	..	66	66	14	12	.....	12	.....	...	1	....	1	..	..
1888.	1	.....	O	..	119	119	75	65	.....	65	.....	...	....	1	1	..	..
1889.	.....	1	O	..	60	60	75	4	8	12	.....	...	....	1	1	..	..
1890.	4	.....	O	..	60	60	75	45	.....	45	.....	...	....	....	....	....	....
1891.	.....	.....	O	..	60	60	16	10	.....	10	.....	...	....	....	....	....	....
1892.	3	3	O	..	60	60	300	300	.....	300	.....	...	3	1	11	Y	Y
1893.	7	7	O	..	60	48	700	600	.....	600	.....	...	7	5	12	..	..
1894.	7	1	O	..	57	57	150	20	75	95	.....	...	1	....	3	..	..
1895.	1	.....	O	R	60	60	12	12	.....	12	.....	...	....	....	....	....	....
1896.	P 1	.....	L	..	60	69	17	16	.....	16	7	...	....	....	....	....	....
1897.	2	1	O	..	60	60	30	15	.....	15	.....	...	....	....	2	Y	Y
1898.	3	1	O	..	60	60	50	43	.....	43	.....	...	....	....	1	..	..
1899.	1	.....	L	..	60	60	5	2	3	5	.....	...	....	1	1	..	..
1900.	2	2	O	..	60	48	60	32	.....	32	.....	...	....	....	1	..	..
1901.	3	1	L	..	60	60	85	25	.....	25	.....	...	2	1	5	..	..
1902.	.....	1	L	I	60	60	12	3	.....	3	.....	...	....	....	4	..	..
1903.	3	3	O	R	60	60	240	239	1	240	9	...	6	4	7	..	N
1904.	5	.....	O	..	60	54	75	12	.....	12	.....	...	4	....	2	..	Y
1905.	7	.....	O	..	60	60	180	180	.....	180	25	...	2	....	4	..	..
1906.	3	.....	O	..	60	60	90	90	.....	90	5	...	....	....	....	....	....
1907.	3	.....	O	..	60	60	20	12	3	15	.....	...	....	....	2	Y	Y
1908.	1	.....	O	..	60	60	25	6	.....	6	.....	...	....	....	1	..	..
1909.	5	.....	O	I	60	....	10	.....	.....	.....	.....	...	....	....	2	..	..
1910.	.....	P 1	L	R	.. 60	60	14	2	8	10	1	...	....	....	1	..	..
1911.	1	2	O	..	60	60	100	85	15	100	20	...	....	....	8	..	..
1912.	3	.....	..O	..	60	54	100	70	.....	70	.....	...	....	....	3	....	..
1913.	3	4	O	..	60	60	250	122	105	227	.....	...	2	2	5	Y	..
1914.	.....	P 1	L	..	60	60	8	4	1	5	.....	...	....	....	1	..	..
1915.	6	.....	O	..	54	54	70	40	.....	40	.....	...	....	1	1	..	..
1916.	.....	P 1	L	..	60	60	10	10	.....	10	.....	...	....	1	1	..	..
1917.	5	.....	L	I	60	48	30	3	.....	3	.....	...	....	....	3	....	..
1918.	1	.....	O	R	60	72	27	23	4	27	2	...	....	....	2	Y	..
1919.	1	1	O	..	60	60	16	16	.....	16	.....	...	....	....	2	..	..

PRICE COUNTY.

Running number	Doors.		Elevators				Machinery vats and pans guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1877.	O	N	.....	.....	.....	.....	Y	Y	.....	G	40	....	1	1	60	....	....
1878.	.....	..	.....	.....	.....	.....	.....	..	.....	G	52	....	4	4	100	....	....

MARINETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pans guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1879.	I	N	.....	.....	.....	.....	Y	Y	Y	G	13 52	....	2	2	215	6500	....

RACINE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pans guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1880.	I S	N	.....	.....	.....	.....	Y	Y	.....	G	52	....	....	....	....	....	....
1881.	O	..	1	Y	G	Y	N	.....	.....	G	52	....	1	3	44	....	....
1882.	.....	..	.....	.....	.....	.....	Y	Y	.....	G	52	....	5	2	500	....	....
1883.	S I	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	75	....	....
1884.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
1885.	.....	..	.....	.....	.....	.....	..	..	.....	G	50	....	2	1	65	....	....
1886.	I	..	2	Y	B	Y	..	..	.....	G	38	....	1	2	62	....	....
1887.	I	..	.....	.....	.....	.....	N	..	.....	G	50	....	1	1	120	....	....
1888.	S	..	.....	.....	.....	.....	..	..	.....	G	52	....	6	5	1650	....	....
1889.	O	..	.....	.....	.....	.....	..	..	Y	G	52	....	1	1	12	....	....
1890.	.....	.....	.....	.....	.....	.....	.....	N	.....	G	45	....	1	1	12	....	....
1891.	.....	N	.....	.....	.....	.....	Y	.....	.....	.....	52	....	2	2	60	....	....
1892.	O	..	2	Y	B D	Y	.....	Y	.....	G	52	....	3	2	400	....	....
1893.	I S	..	5	Y	D G	..	N	..	Y	G	50	....	6	4	550	....	....
1894.	I O	..	1	..	B	..	Y	..	..	G	48	....	2	3	150	....	....
1895.	.....	N	.....	.....	.....	.....	Y	.....	.....	.....	52	1	1	1	60	....	....
1896.	.....	..	.....	.....	.....	.....	..	Y	.....	G	52	....	....	1	....	....	G 5
1897.	S	..	.....	.....	.....	.....	..	..	.....	G	42	....	1	1	10	....	....
1898.	I	..	1	Y	B	Y	N	..	.....	G	52	....	1	1	60	....	....
1899.	I	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	8	....	....
1900.	I	..	1	Y	B	Y	N	..	.....	.....	50	1	2	1	75	....	....
1901.	I S	.....	2	..	B D	..	Y	..	.....	G	40	....	2	1	100	....	....
1902.	I S	.....	1	..	D	..	..	..	.....	G	.....	....	1	2	100	....	....
1903.	S I	N	6	..	D G	N	N	..	.....	F	29	1	2	1	200	....	....
1904.	S	..	.....	.....	.....	.....	..	..	.....	G	40	....	1	2	35	....	....
1905.	I S	..	2	Y	B	Y	.....	..	Y	G	52	....	1	1	60	....	....
1906.	.....	..	.....	.....	.....	.....	N	..	.....	G	52	....	1	1	90	....	....
1907.	I S	..	.....	.....	.....	.....	Y	..	Y	G	40	....	....	....	....	....	....
1908.	I	..	.....	.....	.....	.....	..	..	.....	G	.....	....	1	1	10	....	....
1909.	I S	..	.....	.....	.....	.....	..	..	.....	G	22	....	1	2	16	....	....
1910.	O	..	.....	.....	.....	.....	N	..	Y	G	52	....	1	1	10	....	....
1911.	O S	..	1	Y	S D	Y	Y	..	..	G	45	....	1	1	60	....	....
1912.	I	..	.....	.....	.....	.....	..	..	.....	.....	50	....	1	1	100	....	....
1913.	I S	..	4	Y	D B	Y	.....	..	Y	G	50	....	5	3	130	....	....
1914.	I	..	1	..	B	..	Y	..	.....	G	52	....	1	1	8	....	....
1915.	I	..	1	..	B	..	..	..	.....	F	43	....	2	2	130	....	....
1916.	I	..	.....	.....	.....	.....	N	..	.....	G	52	....	....	....	....	....	G 8
1917.	.....	..	1	Y	B	Y	..	..	.....	G	32	....	1	1	50	....	....
1918.	O	..	1	..	D	..	Y	..	Y	..	52	....	....	1	7	....	15
1919.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	1	75	....	....

RACINE.

	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
1920.	1	.....	L	R	60	60	25	20	.....	20	8	...	.....	.....	1	Y	Y
1921.	3	.....	O	..	48	48	6	4	.....	4	.....	...	.....	.....	4	..	N
1922.	.....	P 1	L	..	60	60	25	14	3	17	3	...	.....	.....	1	..	Y
1923.	1	2	O	..	60	60	350	195	155	350	.....	...	2	.....	2	..	..
1924.	6	5	O	..	60	60	500	290	1	291	13	...	9	3	10	..	..
1925.	1	.....	L	..	60	60	7	1	6	7	.....	...	.....	.....	.....	.....	.....
1926.	2	2	O	..	60	60	50	11	.....	11	.....	...	.....	1	1	Y	Y
1927.	2	2	L	..	60	60	100	44	6	50	1	...	.....	.....	2	..	..
1928.	3	1	O	..	60	60	25	15	.....	15	.....	...	.....	.....	2	..	..
1929.	1	.....	O	..	60	60	25	17	.....	17	.....	...	.....	.....	.....	.....	.....
1930.	7	1	O	..	60	60	80	70	.....	70	15	...	1	.....	2	Y	Y
1931.	5	.....	O	..	60	60	150	50	.....	50	2	...	.....	.....	2	..	..
1932.	1	.....	O	..	60	60	25	6	.....	6	.....	...	.....	.....	.....	.....	.....
1933.	.....	2	L	..	60	60	20	12	.....	12	.....	...	.....	1	4	Y	Y
1934.	9	3	O	..	60	48	300	235	.....	235	20	...	4	1	2	..	..
1935.	.....	1	L	..	60	60	100	18	60	78	.....	...	.....	.....	1	..	..
1936.	5	1	O	..	60	60	220	200	.....	200	30	...	.....	.....	2	..	..
1937.	2	.....	O	..	60	48	20	20	.....	20	7	...	.....	1	1	..	..
1938.	.....	P 1	L	..	60	60	25	2	12	14	.....	...	.....	.....	1	..	..
1939.	.....	P 1	O	..	60	60	15	6	8	14	1	...	.....	1	1	..	..
1940.	1	.....	L	..	60	48	15	14	.....	14	.....	...	.....	.....	1	..	..
1941.	2	.....	L	..	60	60	20	5	5	10	.....	...	.....	1	1	..	..
1942.	2	1	L	..	60	60	50	5	.....	5	.....	...	.....	.....	2	.....	.....
1943.	1	.....	L	..	60	48	6	4	2	6	.....	...	.....	.....	1	Y	Y
1944.	14	8	O	..	60	60	625	500	20	520	35	...	4	2	8	..	..
1945.	.....	3	O	..	60	60	150	50	100	150	25	...	2	.....	2	..	..
1946.	1	.....	L	..	60	60	25	15	.....	15	.....	...	.....	.....	.....	.....	.....
1947.	2	2	O	I	60	.....	40	.....	.....	.....	1	...	.....	.....	2	Y	Y
1948.	2	.....	O	I	60	60	8	5	.....	5	.....	...	.....	.....	.....	.....	.....
1949.	1	1	O	R	60	60	5	5	.....	5	.....	...	1	.....	1	Y	Y
1950.	.....	5	O	R	48	48	300	165	12	177	15	...	5	2	4	Y	Y
1951.	4	1	O	..	60	60	50	23	.....	23	.....	...	.....	.....	2	..	..
1952.	.....	1	L	..	59	59	32	26	6	32	2	...	.....	1	1	..	..
1953.	P 1	.....	L	..	60	60	10	3	7	10	.....	...	.....	.....	.....	.....	.....
1954.	2	.....	O	..	60	60	20	14	.....	14	.....	...	.....	2	2	Y	Y

REEDSBURG.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1955.	3	.....	O	R	60	60	5	4	.....	4	.....	...	.....	.....	2	Y	Y
1956.	3	1	O	..	60	60	5	5	.....	5	.....	...	.....	.....	1	..	..
1957.	2	.....	O	..	60	60	15	15	.....	15	.....	...	.....	.....	.....	.....	.....
1958.	2	.....	O	..	60	60	7	7	.....	7	.....	...	.....	1	1	Y	Y
1959.	5	.....	O	..	60	60	20	13	.....	13	.....	...	.....	.....	1	..	..
1960.	2	.....	O	..	144	144	5	5	.....	5	.....	...	.....	.....	.....	.....	.....
1961.	P 1	.....	L	..	60	60	8	5	.....	5	1	...	.....	.....	.....	.....	.....
1962.	7	1	O	..	60	60	149	46	49	95	4	...	.....	.....	2	.....	Y
1963.	3	.....	O	..	60	60	8	6	.....	6	.....	...	.....	.....	.....	.....	.....
1964.	2	.....	O	..	60	60	8	5	.....	5	.....	...	.....	.....	.....	.....	.....

RACINE COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
1920.	S I	N	.....	.....	.....	.....	Y	Y	.....	G	.....	....	....	....	....	....	....
1921.	I	..	.....	.....	.....	.....	N	.....	.....	F	40	....	1	1	15	....	....
1922.	O	..	.....	.....	.....	.....	.....	Y	Y	G	52	....	....	....	....	....	....
1923.	I	..	1	Y	2 D	Y	Y	..	..	G	52	....	2	1	60	....	....
1924.	I S	..	5	..	3 D	..	.....	..	..	G	37	....	6	3	176	....	....
1925.	.....	..	.....	.....	.....	.....	Y	..	..	G	52	....	1	1	10	....	....
1926.	I S	..	1	Y	B	Y	N	..	.....	G	52	....	1	1	50	....	....
1927.	I S	..	1	..	B	..	..	..	Y	G	40	....	2	1	30	....	....
1928.	I S	..	1	..	D	..	Y	..	.....	....	30	....	2	1	45	....	....
1929.	.....	..	.....	.....	.....	.....	..	.....	.....	....	52	....	....	....	....	....	....
1930.	I S	..	1	Y	B	N	..	Y	Y	G	52	....	2	1	275	....	....
1931.	S I	..	.....	.....	.....	.....	N	..	.....	....	52	....	1	2	50	....	....
1932.	.....	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	....	....	....	....
1933.	S	..	1	Y	G	Y	..	Y	.....	G	52	....	....	....	....	....	G10
1934.	S I	..	8	..	3 G	..	N	..	.....	G	46	....	4	4	400	....	....
1935.	S	.....	1	Y	B	..	Y	..	Y	G	48	....	1	1	30	....	....
1936.	Y	N	1	..	2 D	..	..	..	.....	G	52	....	1	2	65	....	....
1937.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	30	....	....
1938.	I	..	1	Y	D	N	N	..	Y	G	52	....	....	1	5	....	....
1939.	O	..	1	..	....	Y	Y	..	..	G	52	....	....	....	....	....	....
1940.	S	.....	.....	.....	.....	.....	..	..	.....	G	40	....	1	1	4	....	....
1941.	S	N	.....	.....	.....	.....	..	..	.....	G	50	....	....	....	....	....	....
1942.	O	..	1	Y	B	Y	N	..	.....	F	50	....	1	1	40	....	....
1943.	O	..	1	..	G	..	Y	..	Y	....	52	....	1	1	60	....	....
1944.	S	..	6	..	2 B	..	N	..	..	G	45	....	2	2	250	....	....
1945.	I	..	1	..	B	..	..	..	..	G	40	....	2	2	60	....	....
1946.	.....	..	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	4	....	....
1947.	I	..	3	Y	B	Y	..	..	.....	G	36	....	1	1	60	....	....
1948.	.....	..	.....	.....	.....	.....	..	N	.....	G	52	....	1	1	85	....	....
1949.	I	.....	1	Y	....	N	.....	Y	.....	G	50	....	1	1	40	....	....
1950.	I S	N	4	Y	D B	Y	Y	Y	Y	G	35	....	2	1	150	....	....
1951.	.....	..	1	..	D	..	.....	..	.....	....	50	....	2	1	150	....	....
1952.	O	..	.....	.....	.....	.....	Y	..	Y	G	52	....	....	1	....	....	30
1953.	.....	..	.....	.....	.....	.....	..	..	..	G	52	....	....	....	....	....	....
1954.	I	..	.....	.....	.....	.....	N	..	.....	G	51	1	1	1	75	....	....

SAUK COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
1955.	I S	N	.....	.....	.....	.....	Y	Y	.....	G	52	....	1	1	8	....	....
1956.	.....	..	.....	.....	.....	.....	..	..	.....	G	.....	....	1	1	75	....	....
1957.	.....	..	.....	.....	.....	.....	..	.....	.....	....	51	....	1	1	25	....	....
1958.	I	..	.....	.....	.....	.....	.....	Y	.....	G	52	....	....	....	....	4	7
1959.	I	..	.....	.....	.....	.....	Y	..	.....	G	47	....	1	1	45	....	....
1960.	.....	..	.....	.....	.....	.....	N	..	.....	G	52	....	....	....	....	....	....
1961.	.....	..	.....	.....	.....	.....	Y	..	.....	G	52	....	....	....	....	4	....
1962.	.....	..	1	Y	G	Y	N	..	Y	G	35	....	2	1	85	85	....
1963.	.....	..	.....	.....	.....	.....	N	..	.....	G	52	....	1	1	15	....	....
1964.	.....	..	.....	.....	.....	.....	Y	..	.....	G	32	....	2	2	98	....	....

REEDSVILLE.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
1965.	3	.....	O	R	66	66	2	2	.....	2	.....	...	....	....	1	Y	Y
1966.	1	1	O	..	60	60	5	3	.....	3	.....	...	....	....	1	..	..
1967.	6	.....	O	..	60	60	45	43	.....	43	4	...	....	1	1	N	..
1968.	2	.....	O	I	66	66	25	8	.....	8	.....	...	....	....	1	Y	..
RHINELANDER.																	
1969.	2	.....	L	R	60	60	8	6	.....	6	.....	...	....	....	....	....	....
1970.	7	.....	O	I	60	....	135	30	.....	30	.....	...	....	....	....	....	....
1971.	4	.....	O	..	60	.....	125	25	.....	25	.....	...	....	2	2	Y	Y
1972.	6	.....	O	..	60	.....	100	15	.....	15	.....	...	....	1	1	..	..
1973.	4	.....	O	R	60	60	20	15	.....	15	.....	...	....	....	....	....	....
1974.	.....	.....	O	..	72	72	70	5	.....	5	.....	...	....	....	....	....	....
1975.	3	.....	O	..	90	90	5	5	.....	5	.....	...	....	....	....	....	....
1976.	1	.....	O	..	60	60	2	2	.....	2	.....	...	....	....	....	....	....
1977.	4	.....	O	..	60	60	50	30	.....	30	2	...	....	....	1	Y	Y
1978.	1	.....	L	..	48	48	3	2	.....	2	1	...	....	....	....	....	....
1979.	P 1	.....	L	..	60	60	6	2	3	5	.....	...	....	....	....	....	....
1980.	P 1	.....	O	..	60	60	5	2	2	4	.....	...	....	....	....	....	....
1981.	4	.....	O	..	60	60	15	12	.....	12	.....	...	....	....	....	....	....
1982.	5	.....	O	..	60	60	40	30	.....	30	11	...	....	....	....	....	....
1983.	5	.....	O	..	60	60	15	14	.....	14	.....	...	....	....	....	....	....
1984.	3	.....	O	I	60	.....	35	1	.....	1	2	...	....	1	1	....	....
1985.	P 1	.....	L	R	60	60	2	2	.....	2	.....	...	....	1	1	Y	Y
1986.	5	2	O	..	60	60	130	80	.....	80	7	...	....	....	6	..	..
1987.	5	.....	O	..	60	60	15	15	.....	15	.....	...	....	....	....	....	....
RIB LAKE.																	
1988.	5	.....	O	R	60	60	75	22	.....	22	1	...	....	....	....	....	....
1989.	7	.....	O	..	66	60	180	180	.....	180	1	...	....	3	2	Y	Y
1990.	1	.....	O	..	60	60	12	12	.....	12	2	...	....	....	....	....	....
1991.	11	.....	O	..	66	60	40	40	.....	40	.....	...	....	3	....	Y	Y
RICE LAKE.																	
1992.	9	.....	O	R	60	60	50	22	.....	22	4	...	....	....	....	....	....
1993.	1	.....	O	I	60	....	16	.....	.....	.....	.....	...	....	....	....	....	....
1994.	4	.....	O	R	66	66	275	240	.....	240	.....	...	....	3	2	Y	Y
1995.	4	.....	O	..	60	60	20	15	.....	15	.....	...	....	....	2	....	N
1996.	3	.....	O	..	60	60	55	12	.....	12	4	1	....	....	....	....	....
RINGLE.																	
1997.	2	.....	O	I	66	....	30	.....	.....	.....	.....	...	....	....	1	Y	Y
1998.	1	.....	O	R	60	60	14	14	.....	14	.....	...	....	....	....	....	....

MANITOWOC COUNTY.

Running number	**Doors.**		**Elevators.**				Machinery vats and pan guarded.	**Closets.**		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	**Horse-Power**		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1965.	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	15	....	....
1966.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	35	....	....
1967.	O	..	....	....	....	....	N	....	....	F	....	....	1	1	60	....	....
1968.	O S	..	....	....	....	....	....	....	....	G	26	....	1	1	50	....	....

ONEIDA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1969.	I	N	....	....	....	....	Y	Y	....	G	30	....	1	1	75	....	....
1970.	....	....	....	....	....	....	....	..	....	....	33	....	10	3	....	....	....
1971.	I	N	....	....	....	....	Y	..	....	G	33	....	7	2	130	....	....
1972.	I	..	....	....	....	....	..	..	....	G	24	....	4	1	144	....	....
1973.	I	..	....	....	....	....	..	..	....	G	40	....	3	2	150	....	....
1974.	....	..	....	....	....	....	....	..	....	....	24	....	....	....	....	....	....
1975.	I	..	....	....	....	....	....	..	....	....	52	....	3	2	180	....	....
1976.	O	..	....	....	....	....	Y	..	....	....	52	....	....	....	....	5	....
1977.	S	....	....	....	....	....	..	..	....	G	50	....	2	1	200	....	....
1978.	I	N	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
1979.	I	..	....	....	....	....	Y	..	....	....	52	....	1	1	8	....	....
1980.	I	..	....	....	....	....	..	..	Y	G	52	....	....	....	....	5	....
1981.	O	..	....	....	....	....	..	..	....	G	52	....	1	1	35	....	....
1982.	O	..	....	....	....	....	N	..	....	....	50	....	1	1	120	....	....
1983.	I	..	....	....	....	....	Y	..	....	G	35	....	1	1	75	....	....
1984.	....	....	....	....	....	....	..	..	....	G	24	....	5	1	120	....	....
1985.	I	N	....	....	....	....	..	..	....	G	52	....	....	....	....	....	....
1986.	....	..	1	....	....	....	..	..	....	G	35	....	1	2	160	....	....
1987.	O	..	....	....	....	....	..	..	....	G	52	....	1	1	70	....	....

TAYLOR COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1988.	I	N	....	....	....	....	N	Y	....	G	34	....	2	1	100	....	....
1989.	I	..	....	....	....	....	..	..	....	G	52	....	9	3	120	....	....
1990.	O	..	....	....	....	....	..	....	....	G	....	....	1	1	30	....	....
1991.	O	..	....	....	....	....	..	Y	....	G	....	....	8	1	350	....	....

BARRON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1992.	S	N	....	....	....	....	Y	Y	....	G	20	....	1	1	75	....	....
1993.	I	..	....	....	....	....	..	..	....	G	16	....	1	1	25	....	....
1994.	O	..	....	....	....	....	..	..	....	G	29	....	11	4	575	500	....
1995.	O	..	....	....	....	....	N	..	....	G	28	....	1	1	50	....	....
1996.	....	..	....	....	....	....	Y	..	....	....	30	....	1	1	60	....	....

MARATHON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
1997.	O	....	....	....	....	....	Y	....	....	G	4	....	2	1	75	....	....
1998.	....	N	....	....	....	....	..	....	....	....	12	....	....	....	40	....	....

RIPON.

	Buildings.		Plant.		Hours per Week.		Employees.							Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
1999.	1	.....	L	R	60	60	5	5	.....	5	.....	...	....	1	1	Y	Y
2000.	2	.....	O	..	72	72	5	5	.....	5	.....	...	....	....	1	..	..
2001.	2	.....	O	..	60	60	7	7	.....	7	.....	...	....	....	....	....	....
2002.	1	.....	O	..	60	60	5	2	3	5	.....	...	....	....	1	Y	Y
2003.	2	.....	O	..	60	60	6	6	.....	6	.....	...	....	2	1	..	....
2004.	2	.....	O	..	60	60	45	20	18	38	.....	...	....	....	2	..	Y
2005.	3	1	O	..	60	60	8	7	1	8	1	2	....	....	1	..	..
2006.	.....	1	O	..	60	60	4	4	.....	4	.....	...	....	....	1	..	..
2007.	2	.....	O	..	60	60	150	15	70	85	12	4	....	1	3	..	..
2008.	1	.....	O	..	60	60	6	2	.....	2	.....	...	....	....	1	..	..
2009.	1	.....	O	I	60	....	8	8	.....	8	.....	...	....	....	2	..	..
2010.	.....	P 1	O	R	60	60	5	5	.....	5	.....	...	....	....	1	..	..
RIVER FALLS.																	
2011.	8	.....	O	R	60	60	16	16	.....	16	1	...	....	....	....	....	....
2012.	3	1	L	..	60	60	4	3	.....	3	.....	...	....	1	3	Y	Y
ROCK ELM.																	
2013.	2	.....	O	R	60	60	10	10	.....	10	.....	...	....	....	....	....	....
2014.	1	.....	O	..	60	60	25	25	.....	25	.....	...	....	....	....	....	....
2015.	1	.....	O	I	.....	....	7	.....	.....	.....	.....	...	....	....	....	....	....
RICHLAND CENTER.																	
2016.	3	.....	O	I	60	....	20	.....	.....	.....	.....	...	....	....	....	Y	Y
2017.	P 1	.....	L	R	60	60	5	3	2	5	.....	...	....	....	1	..	..
2018.	1	.....	O	..	60	60	7	5	.....	5	2	...	....	....	....	....	....
2019.	10	.....	O	..	60	60	50	35	.....	35	.....	...	....	....	2	Y	Y
2020.	2	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	....	....	....
2021.	1	2	O	I	60	....	5	.....	.....	.....	.....	...	1	....	1	Y	Y
2022.	3	.....	O	R	60	60	12	12	.....	12	.....	...	....	....	....	....	....
2023.	3	.....	O	..	66	66	2	2	.....	2	.....	...	....	....	....	....	....
2024.	1	.....	O	..	60	60	5	3	2	5	.....	...	....	....	1	Y	Y
2025.	1	.....	L	..	60	60	5	3	1	4	1	...	....	....	1	..	..
SANBORN.																	
2026.	3	.....	O	I	60	....	12	.....	.....	.....	.....	...	....	....	....	....	....
SAXON.																	
2027.	3	.....	O	I	60	....	10	2	.....	2	.....	...	....	....	....	....	....
SCHLESSINGERVILLE.																	
2028.	1	.....	O	R	60	60	18	6	.....	6	.....	6	....	....	....	....	....
2029.	5	.....	O	..	60	60	20	7	.....	7	.....	...	....	....	....	....	....
2030.	5	3	O	..	60	60	13	11	.....	11	.....	...	....	....	2	Y	Y

FOND DU LAC COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
1999.	I	N	.....	.....	....	.....	N	Y	.....	G	52	....	....	1	....	....	2
2000.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2001.	.....	..	.....	.....	....	.....	.....	..	.....	....	52	....	2	3	140	....	....
2002.	I	..	.....	.....	....	.....	.....	..	Y	G	52	....	1	1	8	....	....
2003.	O	..	.....	.....	....	.....	N	..	.....	G	50	....	1	1	12	....	14
2004.	I	..	.....	.....	....	.....	Y	..	Y	G	....	....	1	1	8	....	....
2005.	I	..	1	Y	T	Y	..	..	.....	F	52	....	1	1	....	....	....
2006.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	1	1	25	....	....
2007.	O	..	1	Y	T	N	..	..	Y	G	40	....	1	1	35	....	....
2008.	O	..	.....	.....	....	.....	..	..	.....	G	25	....	1	1	35	....	....
2009.	S	..	.....	.....	....	.....	..	..	.....	G	50	....	1	1	75	....	....
2010.	I	..	.....	.....	..	.....	.....	.....	.....	G	52	....	....	....	....	....	....

PIERCE COUNTY.

2011.	I	N	.....	.....	....	.....	Y	Y	.....	....	49	....	....	....	....	....	....
2012.	I	..	.....	.....	....	.....	..	..	.....	....	47	....	....	....	....	65	....

PIERCE COUNTY.

2013.	.....	N	.....	.....	....	.....	Y	Y	.....	....	9	....	1	1	50	....	....
2014.	.....	..	.....	.....	....	.....	N	..	.....	F	22	....	1	1	35	....	....
2015.	.....	..	.....	.....	....	.....	..	.....	.....	....	10	1	1	1	25	....	....

RICHLAND COUNTY.

2016.	I	N	.....	.....	....	.....	Y	Y	Y	....	40	....	1	1	45	....	....
2017.	I	..	.....	.....	....	.....	..	..	.....	G	52	....	....	....	5	....	....
2018.	I	..	.....	.....	....	.....	..	.....	.....	G	26	1	1	1	16	....	....
2019.	O	..	.....	.....	....	.....	..	Y	.....	G	16	....	2	1	400	....	....
2020.	I	..	.....	.....	....	.....	..	.....	.....	G	26	1	....	....	....	125	....
2021.	I	..	.....	.....	....	.....	..	.....	.....	G	26	....	....	....	....	100	....
2022.	I	..	.....	.....	....	.....	..	.....	.....	G	12	....	1	1	50	....	....
2023.	I	..	.....	.....	....	.....	.....	.....	.....	G	52	....	2	1	100	....	....
2024.	I	..	.....	.....	....	.....	Y	Y	Y	....	52	....	1	1	10	....	....
2025.	I	..	.....	.....	....	.....	.....	..	..	G	52	....	....	....	....	....	....

ASHLAND COUNTY.

2026.	.....	.....	.....	.....	....	.....	Y	.....	.....	....	32	....	1	1	30	....	....

IRON COUNTY.

2027.	O	N	.....	.....	....	.....	Y	Y	.....	....	.....	....	2	1	50	....	....

WASHINGTON COUNTY.

2028.	.....	.....	.....	.....	....	.....	Y	.....	.....	....	16	....	....	....	....	....	....
2029.	.....	.....	.....	.....	....	.....	..	.....	.....	....	25	....	1	1	25	....	....
2030.	O	N	.....	.....						G	52	....	2	1	40	....	....

SCOFIELD.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female	Total	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
2031.	4	.....	O	R	120	120	125	115	.....	115	8	...	....	1	1	N	N
SHULLSBURG.																	
2032.	3	.....	O	R	60	60	2	2	.....	2	.....	...	....	....	1	Y	Y
2033.	P 2	.....	L	..	60	60	5	1	3	4	.....	...	....	....	1	....	....
SEYMOUR.																	
2034.	3	.....	O	R	60	60	8	3	.....	3	.....	...	....	....	....	Y	Y
2035.	4	.....	O	..	60	60	16	16	.....	16	2	...	....	2	1	....	....
2036.	1	.....	O	..	60	60	2	2	.....	2	.....	...	....	1	1	Y	Y
2037.	5	.....	O	..	60	60	15	9	.....	9	1	...	....	....	....	....	....
2038.	2	1	O	..	60	60	5	3	.....	3	.....	...	....	....	1	....	....
SHAWANO.																	
2039.	.....	1	O	R	60	60	5	3	.....	3	.....	...	....	....	1	Y	Y
2040.	5	.....	O	..	60	60	10	6	.....	6	.....	...	....	1	1	..	..
2041.	3	.....	O	I	66	....	40	.....	.....	.....	.....	...	....	1	1	....	....
2042.	2	1	O	R	60	60	10	7	.....	7	.....	...	....	....	2	Y	Y
2043.	1	.....	O	..	60	36	7	1	2	3	.....	...	....	....	....	....	....
2044.	5	.....	O	..	144	144	21	21	.....	21	.....	...	....	....	1	Y	Y
SHEBOYGAN.																	
2045.	1	.....	O	R	60	60	6	6	.....	6	.....	...	....	1	2	Y	Y
2046.	2	.....	O	..	60	60	30	28	.....	28	.....	...	....	1	....	..	..
2047.	1	2	O	..	60	60	135	117	8	125	15	...	1	2	....	..	..
2048.	2	1	O	..	60	60	35	15	.....	15	.....	...	1	....	2	..	....
2049.	1	.....	L	..	60	60	18	3	7	10	.....	...	....	....	....	....	....
2050.	1	.....	L	..	60	60	6	1	5	6	.....	...	....	....	1	Y	Y
2051.	1	.....	O	..	60	60	22	22	.....	22	.....	...	....	....	1	..	..
2052.	5	3	O	..	60	60	394	350	44	394	40	...	2	3	8	..	..
2053.	3	1	O	..	60	60	416	374	42	416	60	...	1	1	1	..	..
2054.	1	.....	L	..	60	60	11	11	.....	11	3	...	....	1	1	....	....
2055.	1	3	O	..	66	60	160	160	.....	160	30	...	....	....	2	Y	Y
2056.	1	.....	O	..	60	60	40	15	.....	15	1	...	....	....	1	..	..
2057.	2	.....	O	..	60	48	20	17	3	20	10	...	....	....	3	..	..
2058.	.....	P 1	O	..	60	60	9	9	.....	9	.....	...	....	....	1	..	..
2059.	2	2	O	..	60	60	150	130	4	134	6	...	2	....	2	..	..
2060.	1	2	O	..	60	60	230	179	.....	179	.....	...	1	1	3	..	..
2061.	1	1	O	..	60	60	8	8	.....	8	.....	...	1	1	1	..	..
2062.	2	3	O	..	60	60	24	24	.....	24	.....	...	....	....	6	..	..
2063.	P 1	.....	O	..	60	60	12	5	7	12	.....	...	....	....	1	....	....
2064.	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	....	....	....
2065.	4	.....	O	..	60	60	40	30	.....	30	.....	...	....	1	2	....	....
2066.	.....	1	O	..	60	60	28	28	.....	28	1	...	....	....	2	Y	Y
2067.	5	.....	O	..	60	60	100	77	.....	77	.....	...	....	1	3	..	..
2068.	1	5	O	..	60	60	850	600	.....	600	.....	...	5	1	8	..	..
2069.	4	.....	O	..	60	60	39	20	.....	20	.....	...	....	....	2	....	..

MARATHON COUNTY.

Running number	Doors.		Elevators				Machinery vats and pa guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
2031.	.....	N	.....	.....	.....	.....	N	Y	.....	G	50	....	6	2	....	....	....

LAFAYETTE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pa guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2032.	O	N	.....	.....	.....	.....	Y	.....	.....	G	26	....	1	1	10	....	....
2033.	.....	.....	.....	.....	.....	.....	..	Y	.....	G	52	....	....	....	2	....	....

OUTAGAMIE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pa guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2034.	.....	.....	.....	.....	.....	.....	Y	Y	.....	G	45	....	1	1	10	....	....
2035.	.....	N	.....	.....	.....	.....	N	..	.....	G	32	....	2	1	45	....	....
2036.	O	..	.....	.....	.....	.....	Y	..	.....	...	52	....	....	....	....	2½	....
2037.	O	..	.....	.....	.....	.....	N	..	.....	G	....	....	1	1	50	....	....
2038.	.....	.....	.....	.....	.....	.....	Y	..	.....	G	40	....	1	1	50	....	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pa guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2039.	O	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	200	....
2040.	O	..	.....	.....	.....	.....	Y	.....	.....	G	....	....	....	....	25	....	....
2041.	.....	.....	.....	.....	.....	.....	N	.....	.....	G	32	....	2	1	....	100	....
2042.	O	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	1	1	60	....	....
2043.	O	..	.....	.....	.....	.....	Y	Y	.....	G	12	....	1	1	10	....	....
2044.	O	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	2	....	....	....	....

SHEBOYGAN COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pa guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2045.	O	.....	1	Y	D	Y	Y	Y	.....	G	52	....	1	1	8	....	....
2046.	S	N	1	Y	.....	..	.....	..	.....	G	48	....	1	1	100	....	....
2047.	I	.....	1	Y	D	..	N	..	Y	....	43	....	2	1	65	....	....
2048.	.....	.....	1	Y	D	..	Y	..	.....	G	52	....	1	1	30	....	....
2049.	.....	N	.....	.....	.....	.....	.....	.....	.....	G	52	....	1	1	8	....	....
2050.	O	..	.....	.....	.....	.....	.....	Y	.....	G	52	....	1	1	8	....	....
2051.	O	..	.....	.....	.....	.....	Y	..	.....	G	51	....	....	1	....	....	12
2052.	S	.....	1	Y	G	Y	..	..	Y	G	45	....	3	2	250	....	....
2053.	O	.....	1	Y	.....	.....	..	..	..	G	45	....	5	1	300	....	....
2054.	.....	.....	.....	.....	.....	.....	..	..	.....	G	52	....	....	1	....	....	1
2055.	O	N	2	Y	B	Y	..	..	Y	G	40	....	3	1	200	....	....
2056.	I	..	.....	.....	.....	.....	..	..	.....	G	45	....	....	....	....	....	1
2057.	O	..	1	Y	D	Y	..	..	Y	G	52	....	1	....	....	....	36
2058.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	30	....	....
2059.	I	..	1	Y	B	Y	..	..	Y	G	52	....	2	1	135	....	....
2060.	S	..	1	Y	D	..	..	..	.....	F	52	....	2	1	100	....	....
2061.	I	..	2	Y	D	..	..	..	.....	G	52	....	....	....	....	....	....
2062.	I	.....	.....	.....	.....	.....	..	..	.....	G	52	....	2	2	140	....	M 1
2063.	I	N	.....	.....	.....	.....	..	.....	.....	....	52	....	....	....	....	....	....
2064.	.....	.....	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	30	....	....
2065.	.....	.....	.....	.....	.....	.....	..	.....	.....	G	52	....	....	1	....	....	30
2066.	Y	N	1	Y	D	Y	.....	Y	.....	G	52	....	....	....	....	....	....
2067.	S	..	2	Y	D	..	.....	..	.....	F	50	....	1	1	65	....	....
2068.	S	..	4	Y	G	..	Y	..	.....	G	49	....	8	3	500	....	....
2069.	.....	.....	.....	.....	.....	.....	.....	..	.....	G	51	....	....	....	....	....	25

SHEBOYGAN.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
2070.	1	.....	O	R	60	60	5	5	.....	5	.....	...	....	....	....	....	....
2071.	2	1	O	..	60	60	12	6	1	7	.....	...	....	1	1	Y	....
2072.	1	.....	O	..	60	60	6	5	.....	5	.....	...	....	....	1	..	Y
2073.	3	.....	O	..	60	60	15	10	.....	10	.....	...	....	....	1	....	..
2074.	1	.....	O	..	60	60	7	7	.....	7	.....	...	....	1	1	....	....
2075.	.....	.....	O	..	60	60	100	25	.....	25	.....	...	....	1	2	Y	Y
2076.	3	2	O	..	60	60	225	225	.....	225	.....	...	1	3	3	..	..
2077.	2	9	O	..	60	60	550	425	30	455	106	...	....	4	2	..	..
2078.	3	4	O	..	60	60	45	45	.....	45	.....	...	3	....	20	..	..
2079.	1	1	O	..	60	60	10	6	.....	6	.....	...	....	....	1	....	....
2080.	2	.....	O	I	60	....	14	.....	.....	.....	.....	...	....	....	....	....	....
2081.	4	4	O	R	60	60	365	335	30	365	.....	...	3	1	11	Y	Y
2082.	2	.....	O	..	60	60	30	25	.....	25	.....	...	....	....	2	..	..
2083.	1	.....	O	..	60	60	20	10	.....	10	.....	...	....	....	....	....	....
2084.	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	....	....	....
2085.	P 1	.....	O	..	60	60	9	4	5	9	.....	...	....	1	...	Y	Y
2086.	2	2	O	..	60	60	100	4	10	14	.....	...	....	....	4	..	..
2087.	.....	.....	O	..	168	168	55	55	.....	55	.....	...	....	....	....	....	....
2088.	3	1	O	..	60	60	24	8	15	23	.....	...	....	1	1	Y	Y
2089.	2	2	O	..	60	60	80	78	2	80	8	...	....	1	1	..	..
2090.	1	.....	L	..	60	60	5	4	1	5	.....	...	....	1	....	....	....
2091.	4	.....	O	..	60	60	55	50	2	52	4	...	....	2	3	Y	Y
2092.	9	.....	O	..	60	60	125	115	.....	115	.....	...	....	1	1	..	..
2093.	3	1	O	..	60	60	100	30	.....	30	1	...	....	1	1	..	..
2094.	1	.....	O	..	60	60	5	4	1	5	1	...	....	....	2	..	..
2095.	4	1	O	..	60	60	160	160	.....	160	3	...	1	1	2	..	..
2096.	1	.....	O	I	60	....	20	20	.....	20	.....	...	....	....	....	....	....
2097.	1	2	O	R	60	60	75	40	35	75	12	...	1	....	1	Y	Y
2098.	5	.....	O	..	60	60	50	48	.....	48	4	...	....	2	1	..	..
2099.	1	.....	O	..	60	60	25	6	.....	6	.....	...	....	....	....	....	....

SHEBOYGAN FALLS.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2100.	3	1	O	R	60	60	45	45	.....	45	.....	...	1	2	3	Y	Y

SHELL LAKE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2101.	7	.....	O	R	66	66	359	359	.....	359	.....	...	....	3	4	Y	Y

SHIOCTON.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2102.	5	.....	O	I	60	....	30	.....	.....	.....	.....	...	....	1	1	Y	Y
2103.	2	.....	O	R	60	60	3	2	.....	2	.....	...	....	....	....	....	....

SOUTH RANGE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2104.	.....	.....	O	I	60	....	.....	.....	.....	.....	.....	...	....	....	....	....	....

SHEBOYGAN COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
2070.	.....	.....	.....	.....	.....	.....	Y	..	.....	G	52	....	1	1	25	....	....
2071.	.....	.....	.....	.....	.....	.....	..	..	.....	G	52	....	1	1	55	....	....
2072.	I	N	.....	.....	.....	.....	.....	.....	.....	....	52	....	....	....	....	....	....
2073.	.....	..	.....	.....	.....	.....	Y	.....	.....	G	45	....	1	1	35	....	....
2074.	.....	.....	.....	.....	.....	.....	..	Y	.....	G	52	....	....	1	4	....	....
2075.	O	N	.....	.....	.....	.....	..	.....	.....	....	52	....	6	4	200	....	....
2076.	S	..	2	Y	B	Y	..	Y	.....	G	50	....	7	2	350	....	....
2077.	S	..	2	Y	D	..	..	..	Y	G	60	....	3	2	365	....	....
2078.	O	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	2	190	....	....
2079.	.....	.....	.....	.....	.....	.....	..	.....	.....	G	36	....	1	1	36	....	....
2080.	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	50	....	1	1	20	....	....
2081.	S	N	2	Y	D	Y	N	Y	Y	G	46	....	2	1	300	....	....
2082.	O	..	.....	.....	.....	.....	Y	..	..	G	48	....	1	1	10	....	....
2083.	.....	..	.....	.....	.....	.....	..	..	.....	....	52	....	....	....	....	....	....
2084.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
2085.	I	.....	.....	.....	.....	.....	..	..	Y	G	52	....	....	1	....	....	2
2086.	.....	N	2	Y	G	Y	.....	..	..	G	46	....	1	1	18	....	....
2087.	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	52	....	....	....	....	....	....
2088.	Y	N	1	Y	G	Y	Y	Y	Y	....	28	....	1	1	....	....	15
2089.	I	..	1	..	B	..	..	..	..	G	48	....	2	1	150	....	....
2090.	.....	.....	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
2091.	I	N	1	N	....	N	..	..	Y	F	52	....	1	1	45	....	....
2092.	I	..	2	Y	G	Y	..	..	.....	G	40	....	1	1	60	....	....
2093.	I	..	2	Y	D	..	..	..	.....	G	51	....	2	1	75	....	....
2094.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	....	....	....	....	....
2095.	S	..	1	Y	G	Y	..	.....	.....	G	26	....	2	1	150	....	....
2096.	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	26	1	1	1	15	....	....
2097.	.....	N	2	Y	B	Y	Y	Y	Y	G	40	....	1	1	125	....	....
2098.	I	..	1	Y	B	..	..	..	.....	G	50	....	1	1	60	....	....
2099.	.....	.....	.....	.....	.....	.....	N	..	.....	G	12	....	....	1	G 7	....	....

SHEBOYGAN COUNTY.

2100.	S	N	1	Y	D	Y	Y	Y	.....	G	60	....	2	1	100	....	....

WASHBURN COUNTY.

2101.	S O	N	1	Y	D	Y	Y	Y	.....	G	28½	....	10	6	1125	....	....

OUTAGAMIE COUNTY.

2102.	Y	N	.....	.....	.....	.....	Y	Y	.....	....	2	....	2	2	65	....	....
2103.	Y	..	.....	.....	.....	.....	..	..	.....	G	.....	....	1	1	4	....	....

DOUGLAS COUNTY.

2104.	....	.....	.....	.....	....	.....	.....	.....	....	....	.....	....	....	....	....	....	....

SPARTA.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
2105.	5	.....	O	R	144	144	22	21	1	22	3	...	....	....	3	Y	Y
2106.	4	1	O	..	60	60	15	15	.....	15	.....	...	....	....	....	....	....
SPRING VALLEY.																	
2107.	4	.....	O	R	60	60	12	8	.....	8	.....	...	....	....	....	....	....
2108.	5	.....	O	..	60	60	50	21	2	23	.....	...	....	....	....	....	....
STAADT.																	
2109.	2	.....	O	I	66	.....	25	25	.....	25	.....	..	....	....	1	Y	..
STANLEY.																	
2110.	5	.....	O	R	60	60	375	375	.....	375	15	...	....	3	3	Y	Y
2111.	4	.....	O	..	60	60	25	25	.....	25	10	1	....	1	2	..	....
2112.	1	.....	L	..	60	60	2	2	.....	2	.....	...	....	....	....	....	....
2113.	11	.....	O	..	60	60	65	65	.....	65	.....	...	....	....	3	4	Y	Y
STAR LAKE.																	
2114.	4	.....	.....	R	120	66	155	140	.....	140	1	...	....	....	1	Y	Y
ST. CROIX FALLS.																	
2115.	.....	1	L	R	60	60	2	2	.....	2	.....	...	....	....	1	Y	Y
2116.	3	.....	O	I	60	....	30	.....	.....	.....	4	...	....	....	....	....	....
2117.	3	.....	O	I	60	.....	16	2	.....	2	2	...	....	....	....	....	....
2118.	2	.....	O	R	60	60	4	2	.....	2	.....	...	....	1	1	Y	Y
2119.	1	.....	O	..	60	60	2	2	.....	2	1	1	....	....	....	....	....
STEVENS POINT.																	
2120.	1	.....	O	R	60	72	75	2	57	59	7	...	....	....	....	....	....
2121.	4	.....	O	..	60	60	15	12	.....	12	.....	...	....	....	....	....	....
2122.	2	.....	O	..	60	60	15	10	.....	10	1	...	....	2	2	Y	Y
2123.	2	1	O	..	60	60	10	10	.....	10	.....	...	....	....	2	..	..
2124.	4	1	O	..	60	60	5	5	.....	5	.....	...	....	....	5	..	..
2125.	3	.....	O	..	60	60	16	4	.....	4	.....	...	....	1	1	....	....
2126.	8	.....	O	..	60	60	30	20	.....	20	.....	...	....	....	....	....	....
2127.	5	.....	O	..	60	60	27	26	.....	26	.....	...	....	1	2	....	....
2128.	3	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	2	....	....
2129.	6	.....	O	..	60	60	25	25	.....	25	.....	...	....	....	2	....	....
2130.	P 1	.....	O	..	60	60	8	7	1	8	.....	...	....	1	1	....	....
2131.	5	.....	O	..	60	60	15	15	.....	15	2	...	....	....	1	....	....
2132.	5	.....	O	..	60	60	80	40	.....	40	2	...	....	2	3	....	....
2133.	.....	.....	O	..	54	60	151	151	.....	151	.....	...	....	2	4	....	....
STILES.																	
2134.	2	.....	O	R	60	60	150	55	.....	55	.....	...	....	....	....	....	....

MONROE COUNTY.

Running number.	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
2105.	I	N	1	Y	....	N	N	Y	.....	G	41	....	2	1	150	100	....
2106.	.....	..	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	20	....	....

PIERCE COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2107.	.....	.....	.....	.....	....	.....	N	Y	.....	F	30	....	1	1	25	....	....
2108.	.....	.....	.....	.....	....	.....	Y	..	.....	G	52	....	1	2	45	....	....

MARATHON COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2109.	O	.....	.....	.....	....	.....	.....	.....	.....	G	16	....	1	1	65	....	....

CHIPPEWA COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2110.	S	N	.....	.....	....	.....	Y	Y	.....	G	32	....	15	5	550	....	....
2111.	O	..	.....	.....	....	.....	..	..	N	....	25	....	1	1	75	....	....
2112.	O	..	.....	.....	....	.....	......	..	.....	G	52	....	....	....	....	....	....
2113.	S	..	1	Y	D	Y	Y	..	.....	G	10	....	4	4	200	....	....

VILAS COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2114.	.....	.....	.....	.....	....	.....	Y	Y	.....	G	32	....	7	2	875	....	....

POLK COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2115.	I	N	.....	.....	....	.....	Y	Y	.....	G	52	....	....	....	....	22	....
2116.	S	..	.....	.....	....	.....	.....	..	.....	G	25	....	....	....	50	....	....
2117.	.....	.....	.....	.....	....	.....	.....	N	.....	G	36	....	1	1	35	....	....
2118.	I	N	.....	.....	....	.....	N	Y	.....	G	30	....	1	1	20	....	....
2119.	..	..	.....	.....	....	.....	Y	N	.....	G	30	....	1	1	10	....	....

PORTAGE COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2120.	O	N	.....	.....	....	.....	Y	Y	Y	G	45	....	1	1	25	....	....
2121.	.....	.....	.....	.....	....	.....	..	..	.....	G	52	....	2	1	50	....	....
2122.	S	N	.....	.....	....	.....	..	..	.....	G	45	....	1	1	70	....	....
2123.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	1	1	150	....	....
2124.	O	..	.....	.....	....	.....	Y	..	.....	G	52	....	1	1	40	....	....
2125.	.....	.....	.....	.....	....	.....	.....	..	.....	G	22	....	1	1	35	....	....
2126.	.....	N	.....	.....	....	.....	.....	..	.....	G	50	....	1	1	100	....	....
2127.	.....	.....	.....	.....	....	.....	Y	..	.....	G	52	....	1	1	25	....	....
2128.	.....	.....	.....	.....	....	.....	.....	..	.....	....	52	....	1	1	60	....	....
2129.	.....	.....	.....	.....	....	.....	Y	..	.....	G	44	....	1	1	80	....	....
2130.	.....	.....	.....	.....	....	.....	..	..	.....	G	52	....	1	1	25	....	....
2131.	.....	.....	.....	.....	....	.....	.....	..	.....	G	42	....	1	1	85	....	....
2132.	.....	.....	.....	.....	....	.....	N	..	.....	G	52	....	4	2	160	....	....
2133.	.....	.....	.....	.....	....	.....	.....	.....	.....	....	52	....	2	2	185	....	....

OCONTO COUNTY.

Running number.	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2134.	.....	.....	.....	.....	....	.....	Y	Y	.....	G	51	....	6	1	....	....	....

STOUGHTON.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.						Outside.	Inside	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
2135.	2	.....	O	R	60	60	5	3	.....	3	.....	...	....	....	1	Y	Y
2136.	P 1	.....	L	..	60	60	8	1	3	4	.....	...	....	1	1	Y	Y
2137.	.....	P 1	L	..	60	60	8	3	1	4	.....	...	....	....	1	....	....
2138.	16	.....	O	..	60	60	180	150	.....	150	.....	...	....	1	2	Y	Y

STRATFORD.

2139.	3	.....	O	R	144	144	75	75	.....	75	.....	...	....	1	1	....	....
2140.	2	.....	O	..	66	66	12	12	.....	12	2	...	....	....	....	....	....
2141.	1	.....	O	I	60	....	10	10	.....	10	.....	...	....	....	....	....	....

SOLDIERS GROVE.

2142.	1	.....	O	I	66	....	37	.....	.....	.....	.....	...	....	1	1	Y	Y
2143.	3	.....	O	R	60	60	8	8	.....	8	.....	...	....	....	1	..	..
2144.	1	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	1	....	....
2145.	2	.....	O	..	60	60	8	8	.....	8	1	...	....	....	....	....	....

SPOKEVILLE.

2146.	5	.....	O	R	65	65	20	20	.....	20	.....	...	....	1	....	Y	Y

STETSONVILLE.

2147.	5	.....	O	R	60	60	30	15	.....	15	.....	...	....	1	1	Y	Y

STEUBEN.

2148.	2	.....	O	I	66	....	6	.....	.....	.....	1	...	....	....	....	....	....

SAUK CITY.

2149.	4	.....	O	R	60	60	29	22	7	29	9	...	....	....	....	....	....

STRICKLAND.

2150.	4	.....	O	R	66	66	70	70	.....	70	2	....	....	1	....	Y	Y
2151.	8	.....	O	..	60	60	75	74	.....	74	.....	...	....	2	4	..	..

SUGAR BUSH.

2152.	4	.....	O	R	66	66	25	20	.....	20	.....	...	....	....	....	....	....

DANE COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
2135.	N	N	....	....	....	....	N	....	....	G	52	....	1	1	30	....	....
2136.	..	....	....	....	....	....	Y	Y	....	G	52	....	....	1	3	....	....
2137.	....	....	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
2138.	S	N	2	Y	B	Y	Y	Y	....	G	52	....	2	1	200	....	....
MARATHON COUNTY.																	
2139.	....	....	....	....	....	....	....	....	....	G	36	....	2	1	80	....	....
2140.	S	N	....	....	....	....	Y	....	....	G	36	....	1	1	40	....	....
2141.	N	....	....	....	....	....	..	....	....	G	20	....	1	1	35	....	....
CRAWFORD COUNTY.																	
2142.	I	N	....	....	....	....	....	Y	....	G	12	....	....	....	....	....	....
2143.	O	..	....	....	....	....	Y	....	....	G	40	1	1	1	50	....	....
2144.	O	..	....	....	....	....	..	....	....	G	52	1	....	....	....	40	....
2145.	S	..	....	....	....	....	....	....	....	G	....	....	1	1	50	....	....
CLARK COUNTY.																	
2146.	O	N	....	....	....	....	N	Y	....	G	35	....	2	2	30	....	....
TAYLOR COUNTY.																	
2147.	O	N	....	....	....	....	N	Y	....	F	32	....	1	1	50	....	....
CRAWFORD COUNTY.																	
2148.	O	....	....	....	....	....	Y	....	....	G	26	....	1	1	25	....	....
SAUK COUNTY.																	
2149.	I	N	....	....	....	....	N	Y	Y	G	12	....	2	1	20	....	....
CHIPPEWA COUNTY.																	
2150.	S	N	....	....	....	....	Y	Y	....	G	22	....	5	3	180	....	....
2151.	I	..	....	....	....	....	..	..	....	G	82	....	6	2	350	....	....
OUTAGAMIE COUNTY.																	
2152.	Y	N	....	....	....	....	Y	....	....	G	....	....	2	2	40	....	....

STURGEON BAY.

Running number.	BUILDINGS. 1 to 2 stories.	BUILDINGS. 3 or more stories.	PLANT. Owned or leased.	PLANT. Running or idle.	HOURS PER WEEK. When running full time.	HOURS PER WEEK. Date of inspection.	EMPLOYEES. Full capacity.	EMPLOYEES. Date of Inspection. Male	EMPLOYEES. Date of Inspection. Female.	EMPLOYEES. Date of Inspection. Total.	EMPLOYEES. Date of Inspection. Between 14 and 18 years.	EMPLOYEES. Date of Inspection. Under 14 years	Number of fire escapes.	STAIRWAYS. Outside.	STAIRWAYS. Inside.	STAIRWAYS. Openings guarded.	STAIRWAYS. Have hand rails.
2153.	1	.....	O	R	60	60	7	6	1	7	.....	...	.....	.....	.....	.....	.....
2154.	2	.....	O	..	66	66	35	35	.....	35	3	...	.....	.....	1	Y	Y
2155.	P 1	.....	L	..	60	60	5	3	2	5	.....	...	.....	.....	.....	.....	.....
2156.	3	.....	O	..	60	60	6	2	.....	2	.....	...	.....	.....	1	Y	Y
2157.	2	.....	O	I	60	.....	5	.....	.....	.....	.....	...	.....	.....	1	..	..
2158.	4	.....	O	R	60	60	30	30	.....	30	.....	...	.....	1	1	Y	Y
2159.	4	.....	O	..	144	144	100	75	25	100	35	...	.....	.....	1	..	..
2160.	4	.....	O	..	60	60	70	30	.....	30	.....	...	.....	1	1	.....	..
2161.	4	.....	O	..	60	60	23	21	.....	21	.....	...	.....	.....	1	.....	.....
2162.	2	.....	O	..	66	66	2	2	.....	2	.....	...	.....	.....	.....	.....	.....
2163.	3	.....	O	..	60	60	15	9	.....	9	1	...	.....	1	1	Y	Y

SUPERIOR.

Running number.	BUILDINGS. 1 to 2 stories.	BUILDINGS. 3 or more stories.	PLANT. Owned or leased.	PLANT. Running or idle.	HOURS PER WEEK. When running full time.	HOURS PER WEEK. Date of inspection.	EMPLOYEES. Full capacity.	EMPLOYEES. Date of Inspection. Male	EMPLOYEES. Date of Inspection. Female.	EMPLOYEES. Date of Inspection. Total.	EMPLOYEES. Date of Inspection. Between 14 and 18 years.	EMPLOYEES. Date of Inspection. Under 14 years	Number of fire escapes.	STAIRWAYS. Outside.	STAIRWAYS. Inside.	STAIRWAYS. Openings guarded.	STAIRWAYS. Have hand rails.
2164.	1	1	O	R	144	144	70	70	.....	70	.....	...	1	.....	2	.....	Y
2165.	2	.....	O	..	144	144	87	87	.....	87	.....	...	1	.....	2	Y	..
2166.	4	2	O	..	144	144	100	.....	.....	.....	.....	...	3	.....	2	..	..
2167.	.....	.....	O	..	60	60	24	24	.....	24	.....	...	.....	.....	.....	.....	.....
2168.	3	.....	O	I	60	.....	60	1	.....	1	15	6	.....	.....	2	Y	Y
2169.	3	4	O	R	144	144	75	75	..	75	.....	...	3	.....	2	..	..
2770.	1	.....	O	..	60	60	23	23	..	23	.....	...	.....	.....	.....	.....	.....
2171.	4	.....	O	..	60	60	20	20	..	20	.....	...	.....	1	1	Y	Y
2172.	2	.....	O	..	144	144	40	40	..	40	.....	...	2	.....	2	..	..
2173.	9	.....	O	..	60	60	75	68	.....	63	2	1	.....	.....	.....	.....	.....
2174.	7	3	O	..	60	72	275	202	38	240	25	2	3	1	5	Y	Y
2175.	1	.....	O	..	60	60	6	6	.....	6	.....	...	.....	.....	1	.....	..
2176.	11	.....	O	..	60	48	1200	500	.....	500	6	...	.....	2	5	Y	..
2177.	1	.....	O	..	60	60	6	6	.....	6	.....	...	.....	.....	.....	.....	.....
2178.	P 1	.....	L	..	60	60	15	5	8	13	3	...	.....	.....	.....	.....	.....
2179.	4	.....	L	..	60	60	135	135	.....	135	.....	...	.....	.....	.....	.....	.....
2180.	P 1	.....	L	..	60	60	5	2	.....	2	.....	...	.....	.....	.....	.....	.....
2181.	2	.....	O	..	60	60	3	3	.....	3	.....	...	.....	.....	.....	.....	.....
2182.	.....	P 1	L	..	60	60	25	8	17	25	1	...	1	.....	1	Y	Y
2183.	3	.....	O	..	60	60	20	20	.....	20	.....	...	.....	.....	.....	.....	.....
2184.	.....	.....	L	..	60	60	125	30	.....	30	.....	...	.....	.....	.....	.....	.....
2185.	P 1	.....	L	..	60	60	3	3	.....	3	.....	...	.....	.....	.....	.....	.....
2186.	1	.....	L	..	60	60	5	5	.....	5	1	...	.....	.....	.....	.....	.....
2187.	1	.....	O	..	60	60	4	4	.....	4	.....	...	.....	.....	.....	.....	.....
2188.	3	2	O	..	144	144	22	22	.....	22	.....	...	.....	.....	2	Y	Y
2189.	4	.....	L	I	60	.....	30	.....	.....	.....	.....	...	.....	.....	1	.....	..
2190.	4	.....	O	R	60	60	60	60	.....	60	5	3	.....	1	2	Y	..
2191.	P 1	.....	L	..	60	60	10	8	.....	8	.....	...	.....	.....	.....	.....	.....
2192.	8	.....	O	..	60	60	68	68	.....	68	.....	...	.....	.....	2	.....	Y
2193.	8	.....	O	..	60	60	120	120	.....	120	.....	...	.....	.....	.....	.....	.....
2194.	3	.....	L	..	60	60	9	3	.....	3	.....	...	.....	.....	.....	.....	.....
2195.	1	.....	L	..	60	60	7	7	.....	7	.....	...	.....	.....	.....	.....	.....
2196.	P 1	.....	L	..	60	60	10	3	7	10	.....	...	.....	.....	.....	.....	.....
2197.	1	.....	L	..	54	54	40	36	4	40	3	...	.....	.....	2	Y	Y
2198.	1	.....	L	..	60	60	12	12	.....	12	.....	...	.....	1	1	.....	..

DOOR COUNTY.

	Doors.		Elevators					Closets.							Horse-Power		
Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition	Weeks in operation, 1893.	Number of accidents.	Number of boilers	Number of engines.	Steam.	Water.	Electric, Gas.
2153.	I	N	.....	.....	....	.....	Y	.....	.....	G	52	....	1	1	2	....	....
2154.	O	..	.....	.....	....	.....	..	.....	.....	F	36	....	1	1	120	....	....
2155.	I	..	.....	.....	....	.....	..	Y	Y	G	52	....	1	1	4	....	....
2156.	I	..	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	8	....	....
2157.	I	..	.....	.....	....	.....	..	.....	.....	G	12	....	1	1	25	....	....
2158.	S	..	.....	.....	....	.....	.....	.....	.....	G	40	....	5	1	170	....	....
2159.	S	..	1	Y	B	Y	Y	Y	Y	G	7	....	2	1	30	....	....
2160.	S	..	.....	.....	....	.....	..	.....	.....	G	28	....	1	1	65	....	....
2161.	.....	.....	.....	.....	....	.....	..	.....	.....	G	52	....	1	1	75	....	....
2162.	I	N	.....	.....	....	.....	..	.....	.....	G	52	....	2	2	150	....	....
2163.	S	.....	.....	.....	....	.....	..	.....	.....	G	26	....	1	1	56	....	....

DOUGLAS COUNTY.

	Doors.		Elevators					Closets.							Horse-Power		
Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition	Weeks in operation, 1893.	Number of accidents.	Number of boilers	Number of engines.	Steam.	Water.	Electric, Gas.
2164.	.....	N	1	Y	G	Y	N	Y	.....	G	50	N	3	2	500	....	....
2165.	S	..	1	..	D B	..	.....	..	.....	G	52	..	3	2	385	....	....
2166.	S I	..	1	..	A G	..	Y	..	.....	G	35	....	5	5	....	....	....
2167.	.....	..	.....	.....	....	.....	..	..	.....	G	52	....	2	3	150	....	....
2168.	.....	..	.....	.....	....	.....	..	..	.....	G	16	N	1	1	40	....	....
2169.	.....	..	1	Y	D B	Y	..	..	.....	G	45	....	3	2	600	....	....
2170.	O	..	.....	.....	....	.....	..	..	.....	G	52	N	....	....	....	....	....
2171.	I	..	.....	.....	....	.....	.....	..	.....	G	45	..	....	....	....	....	....
2172.	S	..	1	Y	D B	Y	Y	..	.....	G	52	..	3	2	385	....	....
2173.	.....	..	.....	.....	....	.....	N	..	.....	G	52	....	2	1	100	....	....
2174.	.....	..	2	Y	D B	Y	Y	..	Y	G	50	N	4	3	340	....	....
2175.	I	..	1	..	D	..	..	..	.....	G	52	..	1	1	75	....	....
2176.	O S	..	.....	.....	....	.....	..	..	.....	G	52	..	3	4	220	....	....
2177.	I	..	.....	.....	....	.....	.....	..	.....	G	52	..	....	....	....	....	....
2178.	.....	..	.....	.....	....	.....	.....	..	Y	G	45	....	....	....	....	....	....
2179.	.....	..	.....	.....	....	.....	.....	..	.....	G	28	N	1	1	45	....	....
2180.	.....	..	.....	.....	....	.....	.....	..	.....	G	45	....	....	....	....	....	....
2181.	.....	..	.....	.....	....	.....	.....	..	.....	.....	45	....	....	....	....	....	....
2182.	O	..	1	Y	D	Y	Y	..	Y	G	52	N	1	1	25	....	....
2183.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	..	....	....	....	....	....
2184.	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	37	..	....	....	....	....	....
2185.	.....	N	.....	.....	....	.....	Y	.....	.....	.....	52	....	....	....	....	....	....
2186.	I	..	.....	.....	....	.....	.....	Y	.....	G	52	N	....	....	....	....	....
2187.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2188.	S O	..	.....	.....	....	.....	.....	.....	.....	.....	.....	....	2	1	300	....	....
2189.	S	..	.....	.....	....	.....	.....	Y	.....	G	24	1	1	1	40	....	....
2190.	S I	..	.....	.....	....	.....	.....	..	.....	F	35	N	1	1	30	....	....
2191.	I	..	.....	.....	....	.....	.....	..	.....	G	52	..	....	....	....	....	....
2192.	.....	..	.....	.....	....	.....	Y	..	.....	G	52	..	2	1	30	....	....
2193.	S	..	.....	.....	....	.....	.....	..	.....	G	35	..	....	....	....	....	....
2194.	.....	.....	.....	.....	....	.....	.....	..	.....	G	52	..	....	....	....	....	....
2195.	.....	.....	.....	.....	....	.....	.....	..	.....	G	52	..	....	....	....	....	....
2196.	I	N	.....	.....	....	.....	.....	..	Y	.....	.....	..	1	1	16	....	....
2197.	O	..	.....	.....	....	.....	N	..	..	G	52	..	....	....	....	....	15
2198.	I	..	1	Y	D	Y	Y	..	.....	G	52	..	....	....	....	....	....

SUPERIOR.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.* Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
2199.	3	1	O	R	60	60	....	....	....	....	....	...	3	....	4	Y	Y
2200.	1	....	L	..	60	60	4	2	2	4	....	...	....	....	....	....	....
2201.	2	....	O	..	60	60	79	79	....	79	....	...	3	....	3	Y	Y
2202.	P 1	....	O	..	60	60	6	3	....	3	....	...	....	....	....	....	....
2203.	1	....	O	..	54	54	5	4	1	5	1	...	....	....	2	Y	Y
2204.	2	....	O	..	60	60	80	56	....	56	....	...	4	....	2	..	..
2205.	2	....	O	..	60	60	2	2	....	2	....	...	....	....	....	....	....
2206.	P 1	....	O	..	60	60	15	10	1	11	....	...	....	....	1	Y	Y
2207.	1	....	O	..	60	60	20	13	....	13	....	...	....	....	....	....	....
2208.	2	1	O	..	60	60	10	10	....	10	....	...	....	....	2	Y	Y
2209.	2	....	L	..	60	60	6	3	....	3	....	...	....	....	....	....	....
2210.	1	....	L	..	60	60	8	2	6	8	....	...	....	....	....	....	....
2211.	3	....	O	..	60	60	5	4	....	4	....	...	....	....	....	....	....
2212.	4	1	L	..	60	60	187	187	....	187	....	...	....	....	....	....	....
2213.	11	....	O	..	60	60	40	40	....	40	....	...	....	5	2	Y	Y
2214.	3	2	O	..	144	144	39	39	....	39	2	...	2	....	2	Y	Y
2215.	P 1	....	L	..	60	60	6	6	....	6	1	...	....	....	....	....	....
2216.	P 1	....	L	..	60	60	7	7	....	7	1	...	....	1	1	Y	Y
2217.	6	1	O	..	60	60	250	250	....	250	4	...	....	1	2	..	..
2218.	1	....	L	..	60	60	5	5	....	5	....	...	....	....	....	....	....
2219.	1	....	L	R	54	54	12	10	....	10	....	...	....	....	1	Y	Y
2220.	2	....	O	..	60	60	4	4	....	4	....	...	....	....	....	....	....
2221.	1	....	L	..	60	60	40	39	1	40	....	...	....	....	2	Y	....
2222.	P 1	....	L	..	60	60	50	10	....	10	....	...	....	....	....	....	....
2223.	12	....	O	..	60	60	300	230	....	230	3	...	....	1	2	Y	Y
2224.	....	....	L	..	60	60	167	167	....	167	....	...	....	....	....	....	....
2225.	1	....	L	..	60	60	20	6	....	6	....	...	....	....	....	....	....
2226.	P 1	....	L	..	60	60	15	8	3	11	....	...	....	....	....	....	....
2227.	7	....	....	..	60	60	100	100	....	100	....	...	....	....	....	....	....
2228.	1	....	L	..	60	60	5	1	2	3	....	...	....	....	....	....	....
2229.	3	....	L	..	60	60	22	22	....	22	....	...	....	....	....	....	....
2230.	1	....	L	..	60	60	3	3	....	3	....	...	....	....	....	....	....
2231.	8	....	O	..	60	60	125	125	....	125	3	...	....	3	3	Y	Y
2232.	4	....	O	..	60	60	120	60	....	60	....	...	....	....	....	....	....
2233.	1	....	O	..	60	60	3	2	....	2	....	...	....	....	....	....	....
2234.	1	....	O	..	60	60	5	5	....	5	....	...	....	....	....	....	....
2235.	1	....	L	..	60	60	4	4	....	4	....	...	....	....	1	Y	Y
2236.	3	3	O	I	60	....	60	....	....	....	....	...	4	....	3	..	..
2237.	P 1	....	L	R	48	48	7	6	1	7	....	...	....	....	....	....	....
2238.	1	....	L	..	48	48	15	10	....	10	....	...	....	....	[illegible]	Y	Y
2239.	5	....	L	..	60	60	70	25	....	25	1	...	....	....	....	....	....
2240.	2	....	O	..	60	60	33	33	....	33	....	...	....	....	....	....	....
2241.	1	....	O	..	60	60	6	6	....	6	1	...	....	....	....	....	....
2242.	4	....	O	..	60	60	6	6	....	6	....	...	....	....	....	....	....
2243.	5	....	O	..	60	60	125	125	....	125	....	...	....	6	....	Y	Y
2244.	1	....	L	..	60	60	3	2	1	3	1	...	....	....	1	Y	Y
2245.	2	....	O	..	60	60	3	3	....	3	....	...	....	....	1	..	..
2246.	P 1	....	L	..	60	60	5	5	....	5	....	...	....	....	....	....	....
2247.	4	....	L	..	60	60	15	12	....	12	....	...	....	....	1	Y	Y
2248.	P 1	....	L	..	60	60	15	4	11	15	....	...	....	....	....	....	....

DOUGLAS COUNTY—Continued.

Running number	Doors.		Elevators				Machinery vats and pans guarded.	Closets.		Sanitary condition	Weeks in operation, 1896.	Number of accidents.	Number of boilers	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
2199.	S I	N	1	Y	S G	Y	....	Y	....	....	45	....	4	2	750	....	....
2200.	N	..	....	....	....	....	Y	..	Y	G	....	....	....	1	G 5	....	....
2201.	O S	..	1	Y	A B	Y	....	..	....	G	52	....	5	3	1000	....	....
2202.	....	..	....	....	....	....	....	..	....	G	52	N	....	....	....	....	....
2203.	N	..	....	....	....	....	Y	..	....	....	52	....	....	1	G 5	....	....
2204.	S O	..	....	....	....	....	..	..	....	G	52	N	6	4	900	....	....
2205.	....	..	....	....	....	....	....	..	....	G	45	....	....	....	....	....	....
2206.	I	..	....	....	....	....	....	..	....	G	52	N	....	....	G 7	....	....
2207.	....	..	....	....	....	....	....	..	....	G	52	..	....	....	....	....	....
2208.	N	..	....	....	....	....	....	..	....	G	52	..	1	1	75	....	....
2209.	....	..	....	....	....	....	....	..	....	G	....	....	....	....	....	....	....
2210.	....	....	....	....	....	....	....	..	Y	....	52	....	....	....	....	....	....
2211.	....	....	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2212.	....	....	....	....	....	....	Y	..	....	G	52	N	3	10	275	....	....
2213.	I	N	....	....	....	....	N	..	....	G	52	..	3	17	510	....	....
2214.	....	..	1	Y	....	Y	....	..	....	G	45	..	1	2	375	....	....
2215.	....	....	....	....	....	....	Y	..	....	G	52	....	....	....	....	....	....
2216.	I	N	....	....	....	....	....	..	....	G	52	N	....	....	....	....	....
2217.	S I	..	....	....	....	....	N	..	....	G	9	3	4	2	300	....	....
2218.	....	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2219.	O	N	....	....	....	....	....	Y	....	G	45	....	....	....	....	....	....
2220.	....	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2221.	I	..	1	Y	B	Y	Y	..	Y	G	52	....	1	....	12	....	30
2222.	....	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2223.	O S	..	....	....	....	....	....	..	....	G	52	....	6	3	500	....	....
2224.	....	....	....	....	....	....	....	..	....	....	52	....	2	2	100	....	....
2225.	....	N	....	....	....	....	N	..	....	G	20	....	1	1	15	....	....
2226.	....	..	....	....	....	....	....	....	....	G	....	....	....	....	....	....	....
2227.	I	..	....	....	....	....	Y	Y	....	G	50	....	2	4	210	....	....
2228.	....	..	....	....	....	....	....	..	Y	....	....	....	....	....	....	....	....
2229.	....	..	....	....	....	....	Y	..	....	G	38	....	1	1	60	....	....
2230.	O	..	....	....	....	....	....	..	....	G	....	....	....	....	....	....	....
2231.	S I	..	....	....	....	....	N	..	....	F	45	....	7	3	635	....	....
2232.	....	..	....	....	....	....	....	..	....	G	52	....	2	6	150	....	....
2233.	....	..	....	....	....	....	....	..	....	....	52	....	....	....	....	....	....
2234.	....	..	....	....	....	....	....	..	....	G	45	....	....	....	....	....	....
2235.	I	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2236.	S I	..	1	Y	B	Y	N	..	....	G	45	1	2	2	1035	....	....
2237.	....	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2238.	I	..	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2239.	....	..	1	Y	....	Y	Y	..	....	G	52	....	1	1	35	....	....
2240.	....	..	....	....	....	....	....	..	....	G	....	....	....	....	....	....	....
2241.	I	....	....	....	....	....	....	..	....	G	52	....	....	....	....	....	....
2242.	....	N	....	....	....	....	Y	..	....	G	52	....	1	2	12	....	....
2243.	O	..	....	....	....	....	..	..	....	G	52	....	2	7	270	....	....
2244.	I	..	....	....	....	....	....	..	....	G	52	....	....	1	....	....	5
2245.	I	..	....	....	....	....	....	..	....	G	52	....	1	1	1½	....	....
2246.	I	..	....	....	....	....	....	..	....	G	45	....	....	....	....	....	....
2247.	S	..	....	....	....	....	....	..	....	G	....	1	....	....	....	....	G20
2248.	O	..	....	....	....	....	Y	..	Y	G	52	....	1	1	7	....	....

SUPERIOR.

	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male	Female.	Total.	Between 14 and 18 years.	Under 14 years		Outside.	Inside.	Openings guarded.	Have hand rails.
2249.	7	.....	O	R	60	60	75	70	.....	70	.....	...	....	....	....	....	....
2250.	4	.....	O	..	60	60	12	12	.....	12	.....	...	....	....	....	....	....
2251.	1	.....	L	..	60	60	8	3	.....	3	.....	...	....	....	....	....	....
2252.	1	.....	L	..	60	60	6	3	.....	3	.....	...	....	2	....	....	Y
2253.	1	1	L	..	60	60	50	30	.....	30	.....	...	....	....	....	....	....
2254.	4	.....	O	..	60	60	45	45	.....	45	.....	...	....	1	1	Y	Y
2255.	1	.....	O	..	60	60	3	2	.....	2	.....	...	....	....	....	....	....
2256.	1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	....	....	....
2257.	1	.....	O	..	60	60	4	4	.....	4	.....	...	....	....	....	....	....
2258.	.....	P 1	O	..	60	60	4	4	.....	4	.....	...	....	....	1	....	Y
2259.	1	.....	L	..	60	60	900	900	.....	900	.....	...	....	....	....	....	....
2260.	8	.....	O	..	60	60	35	18	.....	18	1	...	....	....	....	....	....
2261.	1	.....	L	..	60	60	4	4	.....	4	.....	...	....	....	....	....	....
2262.	.....	1	O	..	59	59	50	20	30	50	14	...	1	....	1	Y	Y
2263.	2	.....	O	..	60	60	25	11	14	25	1	...	....	....	2	..	..
2264.	1	.....	L	..	60	60	5	5	.....	5	.....	...	....	....	....	....	....
2265.	19	.....	O	..	60	60	800	60	.....	60	.....	...	....	....	....	....	....
2266.	7	.....	O	..	60	.....	75	5	.....	5	.....	...	....	2	2	....	Y
2267.	3	.....	L	..	60	60	12	12	.....	12	.....	...	....	....	2	....	....
2268.	1	.....	O	..	60	60	100	100	.....	100	.....	...	....	....	....	Y	Y
2269.	7	.....	O	..	60	60	250	100	.....	100	.....	...	....	1	2	....	....

TOMAH.

2270.	3	.....	O	R	66	60	190	180	1	181	2	...	....	....	1	Y	Y

TOMAHAWK.

2271.	1	.....	O	R	60	60	60	60	.....	60	1	...	....	1	2	Y	Y
2272.	2	.....	L	..	60	60	58	58	.....	58	2	...	....	1	1	..	..
2273.	2	.....	L	..	60	60	35	35	.....	35	.....	...	....	....	....	....	....
2274.	3	.....	O	..	60	60	50	14	.....	14	.....	...	....	....	....	....	....
2275.	2	.....	L	..	60	60	20	12	.....	12	3	...	....	....	....	....	....
2276.	1	.....	L	..	60	60	35	27	.....	27	8	...	....	....	....	....	....
2277.	.....	.....	O	..	60	60	10	7	.....	7	.....	...	....	....	....	....	....
2278.	2	.....	O	..	60	60	50	17	.....	17	.....	...	....	....	....	....	....
2279.	1	.....	L	..	68	60	7	7	.....	7	.....	...	....	....	....	....	....
2280.	2	.....	O	..	144	144	25	25	.....	25	.....	....	....	....	....	Y	Y

TOMAHAWK LAKE.

2281.	7	.....	O	R	60	60	28	28	.....	28	.....	...	....	2	2	Y	Y

TIGERTON.

2282.	2	.....	O	R	66	66	40	40	.....	40	.....	...	....	....	1	Y	Y
2283.	1	.....	O	..	66	66	45	45	.....	45	.....	...	....	1	1	..	..
2284.	3	.....	O	..	66	66	25	25	.....	25	.....	...	....	....	3	..	..

DOUGLAS COUNTY—Continued.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
2249.	.....	N	.....	.....	....	.....	Y	Y	.....	G	52	....	3	2	900	....	....
2250.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	1	1	10	....	....
2251.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2252.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2253.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2254.	O	..	.....	.....	....	.....	Y	..	.....	G	52	....	4	3	1000	....	....
2255.	.....	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2256.	S	..	.....	.....	....	.....	.....	..	.....	G	25	....	....	....	....	....	....
2257.	I	..	.....	.....	....	.....	.....	..	.....	G	52	....	....	....	....	....	....
2258.	.....	..	1	.....	....	.....	.....	.....	.....	.....	28	....	....	....	....	....	....
2259.	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	52	....	....	....	....	....	....
2260.	.....	.....	.....	.....	....	.....	Y	Y	.....	G	52	....	1	1	20	....	....
2261.	.....	.....	.....	.....	....	.....	.....	..	.....	G	45	....	....	....	....	....	....
2262.	I	N	1	Y	B	Y	Y	..	Y	G	52	....	1	1	80	....	....
2263.	N	..	.....	.....	....	.....	..	..	..	G	45	....	....	1	...	....	4
2264.	.....	.....	1	Y	....	Y	..	..	.....	.....	.....	....	1	1	35	....	....
2265.	.....	.....	.....	.....	....	.....	.....	..	.....	G	25	....	11	28	2400	40	....
2266.	N	.....	.....	.....	....	.....	.....	..	.....	G	20	....	5	2	270	....	....
2267.	.....	N	.....	.....	....	.....	.....	..	.....	.....	45	....	....	....	....	....	....
2268.	I	..	.....	.....	....	.....	Y	..	.....	G	30	....	....	....	....	....	....
2269.	.....	.....	.....	.....	....	.....	.....	.....	.....	G	50	....	4	9	440	....	....

MONROE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2270.	.....	.....	.....	.....	....	.....	Y	Y	.....	G	52	1	8	4	475	....	....

LINCOLN COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2271.	O	N	.....	.....	....	.....	N	.....	.....		G	31	....	7	1	300	....
2272.	O	..	.....	.....	....	.....	Y	Y	.....	G	31	....	4	1	225	....	....
2273.	O	.....	.....	.....	....	.....	.....	.....	Y	G	31	....	3	1	250	....	....
2274.	O	.....	.....	.....	....	.....	.....	.....	.....	G	31	....	1	1	60	....	....
2275.	.....	.....	.....	.....	....	.....	Y	.....	Y	G	48	....	1	1	75	....	....
2276.	.....	.....	.....	.....	....	.....	.....	.....	.....	G	48	....	....	....	....	....	....
2277.	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	31	....	....	....	....	....	....
2278.	.....	.....	.....	.....	....	.....	.....	.....	.....	G	31	....	1	1	30	....	....
2279.	.....	.....	.....	.....	....	.....	Y	Y	.....	G	50	....	....	....	....	....	....
2280.	Y	N	.....	.....	....	.....	..	..	.....	G	52	....	2	....	....	....	....

VILAS COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2281.	.....	N	.....	.....	....	.....	N	Y	.....	G	28	....	3	3	200	....	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2282.	O	..	.....	.....	....	.....	Y	.....	.....								
2283.	I	..	.....	.....	....	.....	..	.....	.....	G	30	....	2	1	70	....	....
2284.	I	..	.....	.....	....	.....	..	.....	.....	G	20	....	2	2	95	....	....

TWO RIVERS.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.							Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Date of Inspection.							Outside.	Inside.	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.						
2285.	4	.....	L	R	60	60	60	48	7	55	6	...	....		1	1	Y	Y
2286.	6	.....	O	..	60	60	14	10	.....	10	2	...	....		1	1	..	..
2287.	6	2	O	..	60	60	185	168	3	171	.....	...	1		....	4	..	..
2288.	8	.....	O	..	60	60	6	4	.....	4	.....	...	....		....	2	..	..
2289.	2	.....	O	I	60	....	5	.....	.....	.....	.....	...	....		....	1	....	....
2290.	4	1	O	R	60	60	120	120	.....	120	12	...	....		1	1	Y	Y
2291.	9	2	O	..	60	60	270	260	.....	260	80	...	....		1	3	..	..
2292.	4	2	O	..	.....	....	200	20	.....	20	1	...	2		2	3	..	..
TOWN OF UNION.																		
2293.	3	.....	O	R	60	60	25	24	.....	24	.....	...	....		....	....	....	....
VEEFKIND.																		
2294.	6	.....	O	R	120	120	16	16	.....	16	.....	...	....		....	....	....	....
VIKING P. O.																		
2295.	2	.....	O	I	.....	....	6	.....	.....	.....	1	...	....		....	....	....	....
VIROQUA.																		
2296.	1	.....	O	R	60	60	5	2	1	3	....	...	....		....	....	....	....
2297.	1	.....	O	..	60	60	5	3	2	5	....	...	....		....	....	....	....
WARRENS.																		
2298.	5	.....	O	R	60	60	22	13	.....	13	....	...	....		....	....	....	....
WASHBURN.																		
2299.	6	.....	O	R	60	60	183	183	.....	183	.....	...	....		....	4	Y	Y
2300.	4	.....	O	..	60	60	30	26	.....	26	10	...	....		....	1	....	....
2301.	4	.....	O	..	60	60	60	33	.....	33	.....	...	....		....	....	....	....
2302.	4	1	O	..	60	60	35	25	.....	25	.....	...	....		....	2	....	....
2303.	8	.....	O	I	60	....	230	.....	.....	.....	.....	...	....		2	2	Y	Y
2304.	5	.....	O	R	60	60	188	188	.....	188	.....	...	....		2	2	..	..
2305.	1	.....	O	I	60	.....	5	5	.....	5	.....	...	....		....	....	....	....
WATERLOO.																		
2306.	3	1	O	R	60	60	10	5	2	7	.....	...	....		1	1	....	....
2307.	2	.....	O	..	60	60	4	4	.....	4	.....	...	....		1	1	Y	Y
2308.	1	.....	O	I	60	....	5	5	.....	5	.....	...	....		....	....	..	..
2309.	1	.....	O	R	60	48	18	8	.....	8	.....	...	....		....	....	....	....

MANITOWOC COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
2285.	I	..	.....	.....	.....	.....	Y	Y	Y	G	47	....	1	1	20	....	....
2286.	S	..	.....	.....	.....	.....	..	.....	.....	G	48	....	1	1	40	....	....
2287.	I	..	1	Y	G	Y	..	Y	Y	G	52	....	2	1	250	....	....
2288.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	15	....	....
2289.	.....	.....	.....	.....	.....	.....	.....	.....	.....	G	.....	....	1	1	85	....	....
2290.	S	N	.....	.....	.....	.....	Y	Y	Y	G	52	....	5	1	300	....	....
2291.	I	..	.....	.....	.....	.....	..	..	.....	G	52	....	2	1	150	....	....
2292.	I	..	1	Y	D	Y	..	..	Y	G	52	....	4	2	425	....	....
PIERCE COUNTY.																	
2293.	.....	.....	.....	.....	.....	.....	.....	.....	.....	G	48	....	1	1	35	....	....
CLARK COUNTY.																	
2294.	O	N	.....	.....	.....	.....	N	.....	.....	G	48	....	2	1	50	....	....
PIERCE COUNTY.																	
2295.	.....	.....	.....	.....	.....	.....	N	.....	.....	F	8	....	1	1	25	....	....
VERNON COUNTY.																	
2296.	.....	.....	.....	.....	.....	.....	Y	Y	N	G	52	....	1	1	4	....	....
2297.	.....	.....	.....	.....	.....	.....	..	..	..	G	.....	....	1	1	15	....	....
MONROE COUNTY.																	
2298.	.....	.....	.....	.....	.....	N	Y	Y	.....	G	50	....	1	1	40	....	....
BAYFIELD COUNTY.																	
2299.	I	N	.....	.....	.....	.....	N	Y	.....	G	40	1	15	4	1210	....	....
2300.	.....	.....	.....	.....	.....	.....	..	..	.....	G	40	....	1	1	120	....	....
2301.	.....	.....	.....	.....	.....	.....	Y	N	.....	G	.....	....	2	1	100	....	....
2302.	.....	.....	.....	.....	.....	.....	..	Y	.....	F	45	1	2	1	700	....	....
2303.	S	N	.....	.....	.....	.....	N	..	.....	G	32	....	4	3	....	....	....
2304.	O	..	.....	.....	.....	.....	N	..	.....	G	25	....	10	4	260	....	....
2305.	S	..	.....	.....	.....	.....	Y	Y	.....	G	50	....	....	....	....	....	....
JEFFERSON COUNTY.																	
2306.	O	N	.....	.....	.....	.....	Y	.....	.....	G	52	....	1	1	42	....	....
2307.	I	..	.....	.....	.....	.....	..	.....	.....	G	52	....	1	1	35	50	....
2308.	I	..	.....	.....	.....	.....	.....	.....	.....	G	52	....	....	....	....	....	....
2309.	.....	.....	.....	.....	.....	.....	Y	.....	.....	G	52	....	....	....	....	....	....

WATERTOWN.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
								Date of Inspection.									
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.		Outside.	Inside.	Openings guarded.	Have hand rails.
2310.	8	.....	O	R	60	60	20	10	.....	10	.....	.....	.....	1	1	.....	.....
2311.	6	.....	O	..	60	72	20	16	.....	16	5	.....	.....	.....	1	Y	Y
2312.	1	1	O	..	60	60	50	34	.....	84	.....	.....	1	.....	1	..	..
2313.	2	5	O	..	63	63	30	25	.....	25	.....	.....	.....	.....	6	..	..
2314.	3	.....	O	..	60	60	45	36	.....	36	4	.....	.....	.....	1	..	..
2315.	8	1	O	..	72	72	7	6	.....	6	.....	.....	.....	.....	1	.....	.....
2316.	2	.....	O	..	60	60	20	12	.....	12	2	.....	.....	.....	1	Y	Y
2317.	6	5	O	..	60	60	45	9	.....	9	.....	.....	2	.....	5	..	.....
2318.	P 1	.....	L	..	60	60	5	3	.....	3	2	.....	.....	1	1	..	Y
2319.	2	1	O	..	72	72	18	11	.....	11	.....	.....	.....	.....	2	..	..
2320.	6	2	O	..	60	60	35	30	.....	30	.....	.....	.....	.....	2	.....	.....
2321.	P 1	.....	O	..	48	48	9	6	.....	6	1	.....	.....	.....	.....	Y	Y
2322.	7	.....	O	..	60	60	45	19	.....	19	.....	.....	.....	.....	2	.....	.....
2323.	4	1	O	..	60	60	60	60	.....	60	18	.....	.....	.....	1	Y	Y
2324.	P 1	.....	O	..	60	54	5	5	.....	5	.....	.....	.....	.....	.....	.....	.....
2325.	P 1	.....	O	..	60	60	5	2	.....	2	.....	.....	.....	.....	.....	.....	.....
2326.	8	.....	O	..	60	60	17	11	.....	11	2	.....	.....	.....	.....	.....	.....
2327.	P 1	.....	O	..	60	48	7	5	.....	5	1	.....	.....	.....	1	.....	.....
2328.	2	.....	O	..	72	72	5	4	.....	4	.....	.....	.....	.....	1	Y	Y
2329.	4	.....	O	..	60	60	6	5	.....	5	.....	.....	.....	.....	.....	..	..
2330.	8	.....	O	..	59	59	15	7	.....	7	.....	.....	.....	.....	.....	.....	.....
2331.	P 1	.....	L	..	60	60	5	4	.....	4	1	.....	.....	.....	.....	.....	.....
2332.	3	.....	O	..	60	60	100	48	28	76	7	.....	.....	.....	2	.....	.....
2333.	1	.....	L	..	60	60	9	2	5	7	.....	.....	.....	.....	1	Y	.....
2334.	1	.....	L	..	60	60	11	9	2	11	.....	.....	.....	.....	1	..	Y
2335.	.....	P 1	O	..	54	48	50	45	3	48	7	.....	.....	.....	1	.....	.....
2336.	2	.....	O	..	60	60	25	13	1	14	3	.....	.....	.....	1	Y	Y
2337.	2	2	O	..	60	60	75	40	20	60	8	.....	1	.....	.....	..	..

WHITEWATER.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2338.	2	1	O	R	60	60	5	5	.....	5	.....	.....	.....	.....	2	.....	.....
2339.	8	1	O	..	60	60	5	5	.....	5	.....	.....	.....	.....	2	Y	Y
2340.	2	.....	O	..	66	60	7	2	.....	2	.....	.....	.....	1	.....	..	..
2341.	1	.....	O	..	60	60	5	5	.....	5	.....	.....	.....	.....	.....	..	..
2342.	1	.....	O	..	60	60	10	4	2	6	.....	.....	.....	1	1	.....	.....
2343.	2	.....	L	..	60	60	5	2	.....	2	.....	.....	.....	.....	.....	.....	.....
2344.	3	.....	O	..	60	60	10	3	2	5	.....	.....	.....	.....	1	Y	Y

WAUPACA.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2345.	2	1	O	R	60	60	15	8	5	13	2	.....	.....	.....	2	Y	Y
2346.	8	.....	O	..	60	60	20	9	.....	9	.....	.....	.....	1	2	.....	.....
2347.	3	.....	O	I	60	.....	10	6	.....	6	.....	.....	.....	.....	2	Y	Y
2348.	1	1	O	..	60	60	5	4	.....	4	.....	.....	.....	1	2	..	..
2349.	4	.....	O	..	60	60	7	3	.....	3	.....	.....	.....	.....	.....	.....	.....
2350.	14	.....	O	I	60	.....	15	9	.....	9	.....	.....	.....	1	3	Y	Y
2351.	4	.....	O	R	120	120	3	3	.....	8	.....	.....	.....	.....	.....	.....	.....
2352.	1	.....	O	..	60	60	3	2	.....	2	.....	.....	.....	.....	.....	.....	.....
2353.	P 1	.....	L	..	60	60	6	6	.....	6	.....	.....	.....	.....	1	Y	Y
2354.	P 1	.....	L	..	60	60	6	3	3	6	.....	.....	.....	1	1	..	..
2355.	7	.....	O	..	60	60	22	22	.....	22	.....	.....	.....	1	2	..	..
2356.	.....	.....	O	..	60	60	6	3	3	6	.....	.....	.....	.....	.....	.....	.....
2357.	.....	.....	L	..	60	60	5	3	.....	3	.....	.....	.....	.....	.....	Y	Y

JEFFERSON COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas
2310.	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	30	....	....
2311.	O	..	1	Y	G	Y	..	Y	....	G	36	....	1	2	75	....	....
2312.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	25	....	....
2313.	I	..	....	....	....	....	..	Y	....	G	52	....	5	4	355	....	....
2314.	....	....	....	....	....	....	..	....	....	....	26	....	3	3	66	....	....
2315.	S	N	....	....	....	....	..	....	....	G	52	....	1	1	45	60	....
2316.	S	..	....	....	....	....	..	....	....	G	52	....	1	1	35	....	....
2317.	S	..	....	....	....	....	..	Y	....	G	52	....	2	2	360	....	....
2318.	I	..	....	....	....	....	..	..	....	G	52	....	1	1	....	....	....
2319.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	125	150	....
2320.	I	N	....	....	....	....	..	Y	....	G	52	....	3	3	160	....	....
2321.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
2322.	I	..	....	....	....	....	Y	....	....	G	52	....	1	1	18	....	....
2323.	S	..	1	Y	B	Y	..	Y	....	G	40	....	2	1	125	90	....
2324.	I	..	....	....	....	....	....	....	....	G	52	....	....	....	....	....	....
2325.	I	..	....	....	....	....	Y	....	....	G	13	....	1	1	20	....	....
2326.	....	....	....	....	....	....	..	....	....	....	26	....	1	1	15	....	....
2327.	....	N	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....
2328.	I	..	....	....	....	....	Y	....	....	G	52	....	3	1	210	....	....
2329.	I	..	....	....	....	....	..	....	....	F	52	....	1	1	10	....	....
2330.	S	..	....	....	....	....	..	....	....	F	52	....	1	2	20	....	....
2331.	I	..	....	....	....	....	....	Y	....	G	52	....	....	....	....	....	....
2332.	O	..	....	....	....	....	Y	..	Y	G	40	....	1	1	30	....	....
2333.	I	..	....	....	....	....	..	..	..	G	52	....	2	1	6	....	....
2334.	I	..	....	....	....	....	..	..	..	G	52	....	....	1	2	....	....
2335.	I	..	1	Y	G	Y	....	..	..	G	48	....	....	....	....	....	....
2336.	I	..	....	....	....	....	....	..	..	G	52	....	....	....	....	....	....
2337.	O	..	2	....	G	Y	Y	..	..	G	42	....	2	1	32	....	....

WALWORTH COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2338.	I	..	....	....	....	....	Y	....	....	G	52	....	1	1	40	70	....
2339.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	10	....	....
2340.	O	..	....	....	....	....	..	....	....	G	16	....	1	1	40	....	....
2341.	I	..	....	....	....	....	..	....	....	G	52	....	2	2	235	....	....
2342.	I	..	1	Y	D	Y	..	Y	....	G	52	....	1	1	6	....	....
2343.	I	..	....	....	....	....	..	....	....	G	8	....	1	1	8	....	....
2344.	I	..	....	....	....	....	..	Y	....	G	52	....	1	1	10	....	....

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas
2345.	N	N	....	....	....	....	Y	Y	....	G	52	....	....	....	....	35	....
2346.	....	....	....	....	....	....	..	..	....	G	34	....	1	1	50	....	....
2347.	N	N	....	....	....	....	....	..	....	....	24	....	....	....	....	65	....
2348.	N	..	....	....	....	....	Y	..	....	G	52	....	....	....	....	120	....
2349.	N	..	....	....	....	....	..	..	....	G	40	....	1	1	6	....	....
2350.	N	..	....	....	....	....	..	..	....	G	45	....	....	....	....	35	....
2351.	N	..	....	....	....	....	..	..	....	G	52	....	....	....	....	200	....
2352.	N	..	....	....	....	....	..	..	....	G	52	....	....	....	....	100	....
2353.	N	..	....	....	....	....	..	..	....	....	52	....	1	1	....	2½	....
2354.	N	..	....	....	....	....	..	..	....	G	52	....	....	....	....	....	....
2355.	S O	..	....	....	....	....	..	..	....	G	8	....	1	2	80	....	....
2356.	N	..	....	....	....	....	..	..	....	....	52	....	1	1	4	....	....
2357.	N	..	....	....	....	....	..	..	....	G	52	....	....	....	....	36	....

WAUPUN.

Running number.	Buildings.		Plant.		Hours per Week.		Employees.						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male	Female.	Total.	Between 14 and 18 years.	Under 14 years					
2358.	5	.....	O	R	60	45½	60	41	.....	41	.....	...	....	1	1	....	....
2359.	5	.....	L	..	60	72	60	17	48	65	8	...	....	....	4	Y	Y
2360.	1	1	O	..	60	48	2	2	.....	2	.....	...	....	....	2	....	....
2361.	P 1	.....	L	..	60	48	13	10	3	13	.....	...	....	....	1	Y	Y
2362.	3	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	2	..	..
2363.	1	.....	O	..	60	60	31	11	13	24	1	...	....	....	1	..	..
2364.	3	.....	O	..	60	51	20	10	.....	10	.....	...	....	1	2	....	....
2365.	3	.....	O	..	60	72	5	5	.....	5	.....	...	....	....	1	Y	Y
2366.	1	.....	O	..	60	60	40	40	.....	40	3	...	....	1	....	..	..
2367.	1	.....	L	..	60	60	74	1	73	74	.....	...	....	....	3	..	..
2368.	4	.....	L	..	60	60	325	325	.....	325	.....	...	....	1	3	..	..
2369.	.....	1	O	..	60	60	50	.....	50	50	2	...	....	1	....	..	..
2370.	1	.....	O	..	60	60	13	13	.....	13	.....	...	....	1	1	..	..
2371.	1	.....	L	..	60	60	5	5	.....	5	1	...	....	....	....	....	....

WAUSAU.

2372.	4	.....	O	R	60	60	118	102	.....	102	.....	...	....	1	1	Y	Y
2373.	5	.....	O	..	60	60	48	28	.....	28	.....	...	....	....	....	..	..
2374.	P 1	.....	L	..	48	48	5	4	.....	4	1	...	....	....	....	....	....
2375.	P 1	.....	L	..	60	60	6	6	.....	6	.....	...	....	....	1	Y	Y
2376.	4	2	O	..	60	60	250	210	1	211	40	...	....	1	2	..	..
2377.	1	.....	O	..	60	60	12	6	.....	6	.....	...	....	1	1	..	..
2378.	2	.....	O	..	60	60	12	8	.....	8	.....	...	....	....	....	....	....
2379.	2	.....	O	..	60	60	146	145	1	146	40	...	....	....	....	....	....
2380.	3	1	O	..	60	60	10	9	1	10	.....	...	....	1	3	Y	Y
2381.	2	1	O	..	144	144	10	7	1	8	.....	...	....	....	2	..	..
2382.	P 1	.....	L	..	60	60	12	11	1	12	2	1	....	....	....	....	....
2383.	1	.....	L	..	60	60	45	5	.....	5	.....	...	....	....	....	....	....
2384.	.....	.....	O	..	60	60	12	8	1	9	.....	...	....	....	2	Y	Y
2385.	2	.....	O	..	144	144	21	18	1	19	.....	...	....	....	3	..	..
2386.	4	.....	O	..	120	120	145	145	.....	145	6	...	....	....	1	..	..
2387.	1	1	O	..	60	60	60	34	2	36	.....	...	....	....	1	..	..
2388.	4	.....	O	..	60	60	7	5	.....	5	.....	...	....	1	2	..	..
2389.	1	.....	O	..	60	60	5	3	.....	3	.....	...	....	....	1	..	..
2390.	2	2	O	..	60	60	10	10	.....	10	.....	...	....	....	2	..	..
2391.	3	.....	O	..	60	60	10	4	.....	4	.....	...	....	....	1	..	..
2392.	5	.....	O	..	120	120	220	220	.....	220	.....	...	....	....	2	..	..
2393.	9	.....	O	..	60	60	54	54	.....	54	28	...	....	....	....	....	....
2394.	1	.....	O	..	60	60	100	96	1	97	25	6	....	....	....	....	....
2395.	.....	.....	O	..	60	60	60	20	.....	20	.....	...	....	....	....	....	....
2396.	1	.....	O	..	72	72	7	5	.....	5	.....	...	....	....	....	....	....
2397.	3	.....	O	..	60	75	14	14	.....	14	3	...	....	....	1	Y	Y
2398.	4	.....	O	..	60	66	75	75	.....	75	21	...	....	....	1	..	..
2399.	.....	P 1	L	..	60	60	5	4	1	5	.....	...	....	....	1	..	..
2400.	1	.....	O	..	60	60	5	5	.....	5	.....	...	....	1	1	..	..
2401.	3	1	O	..	60	60	20	19	1	20	.....	...	....	....	1	..	..
2402.	3	.....	O	..	168	168	6	6	.....	6	.....	...	....	....	....	....	....
2403.	3	.....	O	..	60	60	50	48	.....	48	3	...	....	....	1	Y	Y
2404.	P 1	.....	L	..	60	60	5	3	1	4	.....	...	....	2	....	..	..
2405.	5	.....	O	..	60	60	50	39	.....	39	.....	...	....	....	11	.	..

FOND DU LAC COUNTY.

Running number	Doors.		Elevators				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
2358.	.....	.....	.....	.....	...	.....	Y	Y	.....	F	40	....	1	....	2	50	....
2359.	O	N	.....	.....	...	.....	..	..	Y	G	52	....	1	1	15	....	....
2360.	.....	.....	.....	.....	...	.....	..	..	.....	F	38	....	2	1	70	....	....
2361.	I	N	.....	.....	...	.....	.....	..	Y	F	51	....	....	....	....	....	....
2362.	I	..	.....	.....	...	.....	Y	..	..	G	52	....	1	1	10	....	....
2363.	Y	..	1	Y	D	Y	..	..	..	G	49	....	....	1	....	....	5½g
2364.	.....	.....	.....	.....	...	.....	..	..	.....	G	52	....	....	....	....	....	....
2365.	I	N	.....	.....	...	.....	..	..	.....	F	48	....	1	1	50	30	....
2366.	O	N	1	Y	B	Y	..	..	.....	G	50	....	....	....	....	....	....
2367.	I	..	1	..	B	..	..	..	Y	F	50	....	1	1	10	....	....
2368.	O	..	1	..	B	..	N	N	.....	F	50	....	3	3	175	....	....
2369.	O	..	1	N	B	..	Y	Y	.....	G	50	....	....	....	....	....	....
2370.	O	.....	.....	.....	...	.....	.....	..	.....	G	50	....	....	....	....	....	....
2371.	O	N	.....	.....	...	.....	.....	..	.....	G	52	....	....	....	....	....	....

MARATHON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2372.	I	N	.....	.....	...	.....	Y	Y	.....	G	33	....	6	3	320	....	....
2373.	S	..	.....	.....	...	.....	..	..	.....	....	9	....	1	2	....	....	....
2374.	.....	.....	.....	.....	...	.....	.....	.....	.....	....	45	....	....	....	....	....	....
2375.	I	N	.....	.....	...	.....	Y	Y	.....	G	52	....	....	....	....	4	....
2376.	S	..	2	Y	T	Y	..	..	.....	G	45	....	4	4	325	....	....
2377.	I	..	.....	.....	...	.....	Y	.....	.....	....	52	....	....	....	....	4	....
2378.	I	..	.....	.....	...	.....	..	Y	.....	G	51	....	1	1	35	....	....
2379.	S	..	.....	.....	...	.....	..	..	Y	G	48	....	4	1	275	....	....
2380.	.....	..	.....	.....	...	.....	N	..	N	G	.....	....	1	1	25	....	....
2381.	I	..	.....	.....	...	.....	Y	..	Y	F	45	....	1	1	75	....	....
2382.	.....	.....	.....	.....	...	.....	.....	.....	.....	F	50	....	....	....	....	....	....
2383.	.....	.....	.....	.....	...	.....	Y	Y	.....	....	32	....	2	1	60	....	....
2384.	I	N	.....	.....	...	.....	..	..	Y	G	52	....	1	3	40	....	....
2385.	S	..	1	Y	B	Y	..	..	.....	F	45	....	....	....	....	....	....
2386.	.....	.....	.....	.....	...	.....	..	..	.....	G	32	....	5	2	350	....	....
2387.	O	N	.....	.....	...	.....	..	..	.....	G	50	....	1	1	75	....	....
2388.	I	..	.....	.....	...	.....	..	..	.....	G	52	....	1	1	20	....	....
2389.	S	..	.....	.....	...	.....	..	.....	.....	....	52	....	....	....	....	....	....
2390.	I	..	.....	.....	...	.....	..	Y	.....	G	52	....	2	2	115	....	....
2391.	I	..	.....	.....	...	.....	N	..	.....	G	.....	....	1	1	10	....	....
2392.	.....	..	.....	.....	...	.....	Y	..	Y	G	32	....	4	1	550	....	....
2393.	S	..	.....	.....	...	.....	..	..	.....	G	44	....	2	1	150	....	....
2394.	S	..	.....	.....	...	.....	.....	.....	.....	....	45	....	2	1	250	....	....
2395.	.....	.....	.....	.....	...	.....	.....	.....	.....	....	28	....	....	....	....	....	....
2396.	I	N	.....	.....	...	.....	N	Y	.....	G	52	....	3	4	360	....	....
2397.	S	..	.....	.....	...	.....	..	..	.....	G	40	....	1	1	125	....	....
2398.	S	..	1	Y	G	Y	Y	Y	.....	G	51	....	1	1	150	....	....
2399.	I	..	.....	.....	...	.....	..	..	Y	G	52	....	....	....	....	....	g2½
2400.	I	..	.....	.....	...	.....	..	..	.....	G	52	....	....	....	....	3	....
2401.	S	..	1	Y	....	Y	N	..	.....	G	.....	....	....	....	....	125	....
2402.	I	..	.....	.....	...	.....	Y	..	.....	G	52	....	2	2	300	....	....
2403.	.....	.....	1	Y	T	Y	..	.....	.....	G	[illegible]	....	1	1	75	....	....
2404.	I	N	.....	.....	...	.....	..	Y	.....	G	52	....	....	....	....	....	G 3
2405.	I	..	.....	.....	...	.....	N	..	.....	G	20	....	4	2	225	....	....

WAUSAUKEE.

	Buildings.		Plant.		Hours per Week.		Employees.							Stairways.			
								Date of Inspection.									
Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2406.	5	.....	O	R	60	60	101	75	1	76	2	...	....	....	2	Y	Y

WAVERLY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2407.	4	.....	O	R	60	60	40	40	.....	40	.....	...	....	1	1	Y	Y

WEBBER.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2408.	1	.....	O	I	66	....	8	8	.....	8	.....	...	....	....	....	....	....

WEST BEND.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2409.	2	.....	O	R	60	59	85	30	.....	30	.....	...	....	....	1	Y	Y
2410.	2	.....	O	..	60	60	20	18	.....	18	2	...	....	....	1	..	..
2411.	4	.....	O	..	60	60	18	18	.....	18	.....	...	....	....	1	..	..
2412.	2	1	O	..	60	60	5	3	.....	3	.....	...	....	....	1	..	..
2413. P	1	.....	L	..	60	60	6	5	.....	5	.....	...	....	....	....	....	....
2414.	6	6	O	..	120	120	29	29	.....	29	.....	...	....	....	4	Y	Y
2415.	2	.....	L	..	60	60	12	12	.....	12	4	...	....	....	....	....	....

WESTBY.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2416.	2	.....	O	R	60	60	8	6	.....	6	.....	...	....	1	1	Y	Y

WEST DEPERE.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2417.	5	.....	O	R	66	66	20	8	.....	8	2	1	....	....	....	....	....
2418.	1	.....	O	I	66	.....	9	.....	.....	.....	.....	...	....	....	....	....	....
2419.	1	.....	O	..	66	.....	15	.....	.....	.....	.....	...	....	....	....	....	....
2420.	7	.....	O	R	60	60	15	15	.....	15	4	...	....	....	....	....	....
2421.	2	.....	O	..	66	66	12	12	.....	12	4	2	....	....	....	....	....

WEYAUWEGA.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2422.	4	.....	O	I	60	60	23	23	.....	23	.....	...	....	....	1	Y	Y
2423.	4	1	O	R	60	60	27	4	.....	4	.....	...	....	....	2	..	..
2424.	2	3	O	..	72	72	6	6	.....	6	.....	...	....	....	3	..	..
2425.	1	.....	O	..	72	72	3	3	.....	3	.....	...	....	....	....	....	....

WHITCOMB.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2426.	1	.....	O	R	60	60	10	8	.....	8	.....	...	....	....	....	....	....
2427.	2	.....	O	..	66	66	35	35	.....	35	.....	...	....	1	1	Y	Y

WHITING.

Running number.	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	Number of fire escapes.	Outside.	Inside.	Openings guarded.	Have hand rails.
2428.	5	.....	O	R	144	144	140	120	10	130	.....	...	3	2	1	Y	Y
2429.	5	.....	O	..	144	144	115	45	70	115	10	...	....	2	6	..	..

MARINETTE COUNTY.

Running number	Doors.		Elevators.				Machinery vats and pan guarded.	Closets.		Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power.		
	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.		Properly provided.	Screened.						Steam.	Water.	Electric, Gas.
2406.	.....	N	.....	.....	....	.....	Y	.....	.....	.....	39	N	4	3	....	....	....

PIERCE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2407.	S	N	.....	.....	....	.....	.....	.....	.....	G	50	N	1	1	70	....	....

MARATHON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2408.	O	N	.....	.....	....	.....	Y	.....	.....	.....	8	N	1	1	25	....	....

WASHINGTON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2409.	I	N	.....	.....	....	.....	Y	Y	.....	G	52	N	1	1	5	....	....
2410.	O	..	.....	.....	....	.....	..	.....	.....	G	48	..	1	1	30	....	....
2411.	I	..	.....	.....	....	.....	..	.....	.....	G	52	..	1	1	50	....	....
2412.	I	..	.....	.....	....	.....	..	.....	.....	G	52	..	1	1	60	108	....
2413.	I	..	.....	.....	....	.....	..	.....	.....	G	52	..	....	1	2	....	....
2414.	I	..	.....	.....	....	.....	..	Y	.....	G	52	..	4	4	150	....	....
2415.	I	..	.....	.....	....	.....	.....	.....	.....	F	52	..	....	1	6	....	....

VERNON COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2416.	I	N	.....	.....	....	.....	Y	Y	Y	.....	20	....	1	1	25	....	....

BROWN COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2417.	.....	.....	.....	.....	....	.....	Y	.....	.....	.....	12	....	1	1	36	....	....
2418.	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	21	....	....	....	....	....	....
2419.	.....	.....	.....	.....	....	.....	Y	.....	.....	.....	21	....	1	1	30	....	....
2420.	.....	.....	.....	.....	....	.....	..	.....	.....	.....	21	....	1	1	40	....	....
2421.	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	21	....	....	....	....	....	....

WAUPACA COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2422.	O	N	.....	.....	....	.....	Y	Y	Y	G	30	....	1	....	....	40	....
2423.	S	..	.....	.....	....	.....	N	..	.....	F	10	....	....	....	....	150	....
2424.	O	..	.....	.....	....	.....	Y	..	.....	G	52	....	....	....	....	1000	....
2425.	O	..	.....	.....	....	.....	..	..	.....	G	52	....	....	....	....	80	....

SHAWANO COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2426.	I	.....	.....	.....	....	.....	Y	.....	.....	.....	4	....	1	1	40	....	....
2427.	O	N	.....	.....	....	.....	..	.....	.....	G	26	....	3	1	85	....	....

PORTAGE COUNTY.

Running number	Swing in or out.	Locked during office hours.	Number.	Condition of cables good.	Kind of doors.	Openings guarded.	Machinery vats and pan guarded.	Properly provided.	Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Steam.	Water.	Electric, Gas.
2428.	O	N	1	Y	....	Y	Y	Y	Y	G	52	....	4	2	400	2700	....
2429.	O	..	2	Y	G	..	..	..	..	G	52	....	2	....	....	1500	....

WILDWOOD.

Running number.	Buildings.		Plant.		Hours per Week.		Employees						Number of fire escapes.	Stairways.			
	1 to 2 stories.	3 or more stories.	Owned or leased.	Running or idle.	When running full time.	Date of inspection.	Full capacity.	*Date of Inspection.*						Outside.	Inside.	Openings guarded.	Have hand rails.
								Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.					
2430.	1	1	O	R	60	60	40	40	.....	40	.....	...	....	1	2	Y	Y

WITTENBURG.

2431.	1	1	O	R	60	60	5	2	.....	2	.....	...	....	....	1	Y	Y
2432.	2	.....	O	..	66	18	20	18	.....	18	.....	...	....	....	1	..	..
2433.	2	.....	O	I	60	.....	23	.....	.....	.....	.....	...	....	....	1	....	....
2434.	5	.....	O	..	60	.....	35	.....	.....	.....	.....	...	....	....	1	....	....
2435.	3	1	O	R	60	60	40	32	.....	32	2	...	....	....	1	Y	Y

WOODBORO.

2436.	7	.....	O	I	60	....	60	2	.....	2	.....	...	....	....	2	Y	Y

WAUKESHA.

2437.	9	2	O	R	60	60	10	10	.....	10	2	2	....	1	1	Y	Y
2438.	2	.....	O	..	60	60	6	6	.....	6	.....	...	....	....	1	..	..
2439.	2	.....	O	..	60	60	25	10	.....	10	.....	...	....	....	1	..	..
2440.	1	1	O	..	60	60	9	9	.....	9	.....	...	....	....	1	..	..
2441.	2	.....	O	..	60	48	5	2	.....	2	.....	...	....	....	1	..	..
2442.	1	.....	O	..	60	60	15	8	.....	8	3	...	....	....	1	..	..
2443.	5	1	O	..	60	60	25	25	.....	25	.....	...	....	....	3	..	..
2444.	2	.....	L	..	60	60	5	4	.....	4	.....	...	....	....	1	..	..
2445.	6	.....	O	..	60	60	20	9	.....	9	.....	...	....	....	1	..	..
2446. P	1	.....	L	..	60	60	20	2	7	9	.....	...	....	....	1	..	..
2447.	2	.....	O	..	60	60	8	4	.....	4	.....	...	....	....	1	....	..
2448.	2	.....	O	..	60	60	15	13	2	15	3	...	....	....	1	Y	Y
2449. P	1	.....	O	..	60	60	8	8	.....	8	.....	...	....	....	1	..	..
2450.	1	.....	O	..	54	54	8	7	1	8	.....	...	....	....	1	....	..
2451.	2	.....	O	..	60	60	5	5	.....	5	.....	...	....	....	....	....	....
2452.	1	.....	O	..	60	60	.....	6	2	8	.....	...	....	....	1	Y	Y
2453.	4	.....	O	..	60	60	10	10	.....	10	.....	...	....	....	1	....	....
2454.	3	.....	O	..	60	60	10	1	.....	1	.....	...	....	1	1	Y	Y
2455.	3	.....	O	..	60	60	128	115	.....	115	8	1	....	....	....	..	....
2456.	2	.....	O	..	60	60	12	8	.....	8	.....	...	....	....	1	..	Y
2457.	4	.....	O	..	60	60	45	20	.....	20	4	...	....	1	1	..	..
2458. P	1	.....	O	..	60	60	10	4	2	6	2	...	....	....	1	....	....
2459.	2	.....	O	..	60	60	25	17	.....	17	2	...	....	....	1	Y	Y
2460.	1	.....	O	..	60	60	3	3	.....	3	.....	...	....	....	1	....	....
2461.	8	.....	O	..	48	48	148	148	.....	148	2	...	....	....	2	Y	Y

WAUZEKA.

2462.	3	.....	O	R	60	60	6	6	.....	6	.....	...	....	....	1	Y	Y
2463.	2	.....	O	I	60	.....	6	.....	.....	.....	.....	...	....	....	....	....	....
2464.	1	.....	O	R	60	60	2	2	.....	2	1	...	....	....	1	Y	Y

PIERCE COUNTY.

Running number	Doors. Swing in or out.	Doors. Locked during office hours.	Elevators. Number.	Elevators. Condition of cables good.	Elevators. Kind of doors.	Elevators. Openings guarded.	Machinery vats and pans guarded.	Closets. Properly provided.	Closets. Screened.	Sanitary condition.	Weeks in operation, 1896.	Number of accidents.	Number of boilers.	Number of engines.	Horse-Power. Steam.	Horse-Power. Water.	Horse-Power. Electric, Gas.
2430.	S	N	....	....	....	....	N	....	....	F	32	....	4	1	150	....	....
SHAWANO COUNTY.																	
2431.	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	25	....	....
2432.	....	..	....	....	....	....	..	....	....	G	20	....	....	....	....	70	....
2433.	O	..	....	....	....	....	..	....	....	G	2	....	2	1	113	....	....
2434.	....	..	....	....	....	....	..	....	....	G	2	....	2	1	125	....	....
2435.	S	N	1	Y	B	Y	N	....	....	G	30	....	1	1	150	....	....
ONEIDA COUNTY.																	
2436.	O	N	....	....	....	....	....	....	....	G	34	....	7	4	175	....	....
WAUKESHA COUNTY.																	
2437.	I	N	....	....	....	....	Y	....	....	G	52	....	1	1	20	....	....
2438.	I	..	....	....	....	....	N	....	....	G	52	....	1	1	4	....	....
2439.	I	..	1	Y	B	Y	Y	....	....	G	52	....	1	1	6	....	....
2440.	I	..	....	....	....	....	..	....	....	F	52	....	1	1	20	....	....
2441.	I	..	....	....	....	....	..	....	....	G	52	....	1	1	40	....	....
2442.	I	..	....	....	....	....	....	....	....	G	52	....	1	1	....	....	....
2443.	I	..	1	Y	S	Y	Y	....	....	G	52	....	2	2	35	....	....
2444.	I	..	....	....	....	....	....	....	....	G	52	....	1	....	....	....	....
2445.	I	..	....	....	....	....	Y	....	....	G	52	....	1	2	78	....	....
2446.	I	..	....	....	....	....	..	....	....	....	52	....	1	1	8	....	....
2447.	I	..	....	....	....	....	..	....	....	F	52	....	2	1	85	....	....
2448.	I	..	1	Y	B	Y	..	Y	Y	G	52	....	1	1	20	....	....
2449.	O	..	....	....	....	....	..	....	....	G	52	....	....	....	2	....	1 G
2450.	I	..	....	....	....	....	..	Y	....	G	52	....	....	....	....	4	....
2451.	I	..	....	....	....	....	..	....	....	G	52	....	2	2	210	....	....
2452.	I	..	1	Y	D	Y	..	Y	....	G	52	....	1	....	4	....	1 G
2453.	....	....	....	....	....	....	..	..	....	G	....	....	....	....	35	....	....
2454.	I	N	....	....	....	....	..	....	....	G	4	....	1	1	5	....	....
2455.	I	..	....	....	....	....	..	....	....	....	52	....	1	1	150	....	....
2456.	S	..	....	....	....	....	..	....	....	G	44	....	1	1	20	....	....
2457.	I	..	1	Y	B	Y	..	....	....	G	52	....	1	1	12	....	....
2458.	....	....	....	....	....	....	..	Y	Y	G	52	....	1	1	18	....	....
2459.	I	N	1	Y	G	Y	..	..	....	G	20	....	1	1	12	....	....
2460.	....	....	....	....	....	....	..	....	....	G	52	....	1	1	112	....	....
2461.	S	N	....	....	....	....	..	Y	....	G	52	....	3	2	270	....	....
CRAWFORD COUNTY.																	
2462.	S	N	....	....	....	....	Y	Y	....	G	30	....	1	1	50	....	....
2463.	....	..	....	....	....	....	..	....	....	G	13	....	1	1	25	....	....
2464.	I	N	....	....	....	....	..	....	....	G	52	....	1	1	35	....	....

TABLE II.—CLASSIFICATION

	Town, City and County.	No. of establishments.	Buildings.		Plant.				Hours Per Week.		No. of engines.	No. of boilers.
			1 to 2 story.	3 or more stories.	Owned.	Leased	Running.	Idle.	Average when running full time.	Average date of inspection.		
1	Albany, Green Co.	4	10	....	4	....	4	....	60	60	2	2
2	Algoma, Kewaunee Co.	6	18	2	5	1	6	....	60	60	6	5
3	Alma, Buffalo Co.	4	5	1	3	1	4	....	68	63	3	3
4	Amery, Polk Co.	4	15	1	4	....	3	1	57	56	2	5
5	Antigo, Langlade Co.	18	20	1	18	....	18	....	60	60	21	27
6	Arcadia, Trempealeau Co.	4	4	1	3	1	4	....	63	63	1	1
7	Ahland, Ashland Co.	26	83	5	23	3	26	....	72	72	43	64
8	Appleton, Outagamie Co.	48	139	29	37	11	47	1	81	77	34	65
9	Baraboo, Sauk Co.	7	10	....	5	2	7	....	59	55	4	5
10	Barron, Barron Co.	4	15	....	4	....	4	....	60	60	13	4
11	Bayfield, Bayfield Co.	4	11	....	3	1	4	....	60	60	2	2
12	Beaver Dam, Dodge Co.	6	16	5	5	1	6	...	62	62	6	10
13	Beloit, Rock Co.	34	109	11	27	7	32	2	67	62	31	35
14	Berlin, Green Lake Co.	19	19	....	14	5	19	...	65	58	8	8
15	Birnamwood, Shawano Co.	4	9	....	4	....	1	3	60	60	4	8
16	Boscobel, Grant Co.	10	25	1	9	1	8	2	60	60	7	6
17	Brillion, Calumet Co.	6	14	2	6	....	5	1	60	60	6	6
18	Brodhead, Green Co.	9	16	1	6	3	9	....	60	60	3	2
19	Burlington, Racine Co.	13	31	....	10	3	12	....	60	60	11	12
20	Cedarburg, Ozaukee Co.	9	13	5	9	....	8	1	61	61	7	8
21	Chilton, Calumet Co.	6	14	1	6	....	6	....	60	60	5	5
22	Chippewa Falls, Chippewa Co.	6	25	5	6	....	5	1	73	73	8	10
23	Clintonville, Waupaca Co.	9	17	2	9	....	8	1	60	57	8	9
24	Darlington, Lafayette Co.	6	7	....	5	1	6	....	60	60	4	2
25	Delavan, Walworth Co.	7	12	....	6	1	7	...	60	60	5	5
26	De Pere, Brown Co.	5	17	7	5	....	5	...	60	59	4	6
27	Eau Claire, Eau Claire Co.	39	140	8	33	6	37	2	63	63	36	76
28	Edgar, Marathon Co.	4	5	....	4	....	3	1	63	63	4	10
29	Edgerton, Rock Co.	4	5	1	3	1	3	1	60	60	3	2
30	Elkhorn, Walworth Co.	7	12	2	7	....	7	...	60	60	6	5
31	Fond du Lac, Fond du Lac Co.	35	63	16	24	11	33	2	63	63	33	34
32	Fort Atkinson, Jefferson Co.	9	41	6	7	2	9	...	59	60	12	13
33	Fountain City, Buffalo Co.	6	10	2	6	....	6	...	62	62	5	4
34	Green Bay, Brown Co.	60	157	16	52	8	54	6	64	64	59	78
35	Hartford, Washington Co.	8	30	6	7	1	7	1	60	58	8	9
36	Hortonville, Outagamie Co.	4	9	4	4	....	3	1	60	60	4	4
37	Hudson, St. Croix Co.	6	20	....	5	1	5	1	61	60	5	13
38	Independence, Buffalo Co.	4	6	1	4	....	4	...	60	60	....	....
39	Janesville, Rock Co.	33	58	14	17	16	32	1	59	59	22	24
40	Jefferson, Jefferson Co.	22	60	10	17	5	22	....	60	60	19	23
41	Kaukauna, Outagamie Co.	16	68	1	13	3	15	1	88	83	14	23
42	Kenosha, Kenosha Co.	20	78	17	13	7	20	...	59	59	37	41
43	Kewaunee, Kewaunee Co.	10	24	2	8	2	9	1	64	64	8	8
44	Lake Mills, Jefferson Co.	4	12	2	3	1	4	...	60	60	3	4
45	La Crosse, La Crosse Co.	76	204	45	50	26	72	4	66	66	93	123

BY CITIES AND TOWNS.

Running number.	Horse Power.			Employees.						Improvements.		Wages paid in 1896.
					Date of Inspection.							
	Steam.	Water.	Electricity.	Full capacity.	Male.	Female.	Total.	Between 14–18 years.	Under 14 years.	On buildings.	On machinery.	
1........	240	170	....	87	22	13	35	....	....	....	....	$2,640
2........	368	....	....	158	92	5	97	13	....	$1,000	....	29,216
3........	185	....	2	21	21	....	21	....	....	....	....	8,281
4........	295	80	....	134	28	....	28	2	....	....	$800	22,760
5........	1,561	....	....	416	389	4	393	29	....	1,650	2,000	117,156
6........	60	....	....	13	12	....	12	1	1	....	....	2,876
7........	4,698	....	....	1,045	909	17	926	11	....	1,298	250	338,010
8........	4,637	....	....	1,705	992	314	1,306	69	1	89,400	46,500	435,023
9........	162	18	2	325	194	62	256	10	....	325	150	43,128
10........	175	160	....	89	39	9	48	3	....	350	600	18,800
11........	40	1	....	114	106	....	106	1	1	500	....	43,740
12........	600	385	....	579	358	170	528	74	....	575	957	99,298
13........	2,225	695	17	1,652	1,126	247	1,373	89	....	3,450	2,000	422,169
14........	412	....	....	608	143	112	255	23	....	....	....	75,787
15........	205	....	....	101	16	....	16	2	....	2,000	....	19,407
16........	185	....	2	125	64	....	64	1	....	....	500	23,950
17........	265	....	....	84	48	....	48	2	....	1,500	2,500	14,078
18........	15	100	....	69	38	6	44	....	....	....	800	14,443
19........	184	....	....	240	102	85	187	34	....	....	800	55,887
20........	236	230	....	307	159	84	243	34	4	....	....	69,536
21........	191	42	....	51	39	....	39	....	....	4,000	8,000	17.248
22........	560	2,155	....	515	196	....	196	5	....	....	6,200	112,357
23........	303	146	....	102	71	3	74	8	....	17,000	35,000	24,899
24........	29	150	....	21	18	....	18	2	....	....	....	4,046
25........	177	85	....	44	26	8	34	1	....	3,000	8,500	9,850
26........	1,165	1,025	....	362	167	153	320	....	....	....	....	115,796
27........	5,140	1,790	27	2,147	1,795	60	1,855	103	1	24,516	49,733	535,903
28........	225	....	....	145	110	....	110	8	....	....	....	20,486
29........	87	....	....	61	28	1	29	2	....	....	....	6,568
30........	92	....	....	59	34	3	37	....	....	1,000	3,500	11,687
31........	2,142	....	70	1,318	1,031	97	1,128	64	....	19,396	16,881	341,830
32........	404	....	....	396	347	19	366	47	....	5,000	....	84,600
33........	107	....	15	27	25	....	25	1	....	....	200	10.707
34........	4,638	....	....	1,735	1,325	85	1,410	75	....	143,600	90.000	474.673
35........	385	75	-2	97	77	15	92	8	....	....	5,500	29,380
36........	179	....	....	50	34	....	34	....	....	1,000	1,300	5.290
37........	632	....	....	413	351	2	353	10	....	1,600	1,200	106.982
38........	....	40	....	9	7	1	8	....	....	....	....	4.060
39........	1,301	....	62	1,393	685	477	1,162	23	....	60,000	7,800	363,791
40........	814	790	1	482	313	34	347	18	....	....	....	140,723
41........	1.107	4,305	....	634	513	47	560	13	....	1,200	....	268,065
42........	2,686	....	1	2,512	1,876	298	2,174	133	....	2,600	10,350	914,861
43........	331	....	....	197	96	48	144	....	....	2,500	12,750	26.057
44........	183	12	....	79	41	....	41	....	....	....	....	28.550
45........	7,781	....	92	3,895	2,390	558	2,948	187	....	....	....	1,094,029

TABLE II.—CLASSIFICATION

	Town, City and County.	No. of establishments.	Buildings.		Plant.				Hours per Week.		No. of engines.	No. of boilers.
			1 to 2 story.	3 or more stories.	Owned.	Leased.	Running.	Idle.	Average when running full time.	Average date of inspection.		
46	Madison, Dane Co	42	92	25	26	16	40	2	61	61	27	31
47	Manitowoc, Manitowoc Co	30	84	8	27	3	29	1	68	66	32	35
48	Marathon, Marathon Co	7	14	....	7	....	5	2	62	62	7	11
49	Marinette, Oconto Co	25	80	12	20	5	25	...	70	70	34	82
50	Marion, Shawano Co	6	8	....	6	....	5	1	60	60	5	5
51	Marshfield, Wood Co	18	70	4	17	1	18	...	68	68	19	32
52	Mattoon, Shawano Co	5	16	....	5	....	5	...	65	65	3	5
53	Mayville, Dodge Co	4	8	3	4	....	4	...	62	62	4	10
54	Medford, Taylor Co	6	15	....	4	2	6	...	60	60	9	10
55	Mazomanie, Dane Co	4	10	1	4	....	2	2	60	60	4	4
56	Menasha, Winnebago Co	18	54	17	16	2	14	4	84	83	22	30
57	Menomonee, Dunn Co	11	57	1	8	3	10	1	60	59	13	11
58	Merrill, Lincoln Co	12	37	2	10	2	10	2	60	60	22	48
59	Milwaukee, Milwaukee Co	636	994	535	365	271	627	9	59	59	666	349
60	Mineral Point, Iowa Co	9	28	5	7	2	8	1	61	61	8	13
61	Monroe, Green Co	15	24	2	6	9	14	1	60	60	10	12
62	Neenah, Winnebago Co	15	33	9	11	4	15	...	95	95	18	21
63	Neillsville, Clark Co	7	27	2	7	....	6	1	60	60	8	8
64	New London, Waupaca Co	16	48	3	13	3	15	1	64	64	17	19
65	Oconto, Oconto Co	14	41	3	12	2	11	3	62	60	18	30
66	Oshkosh, Winnebago Co	75	150	28	54	21	68	7	61	58	94	120
67	Phillips, Price Co	4	18	1	3	1	4	...	81	81	5	23
68	Platteville, Grant Co	15	40	2	11	4	13	2	61	60	11	10
69	Plymouth, Pierce Co	11	26	10	10	1	8	3	60	60	11	11
70	Portage, Columbia Co	13	26	2	6	7	13	...	60	59	11	7
71	Port Washington, Ozaukee Co	12	36	6	11	1	11	1	61	60	1	2
72	Prairie du Chien, Crawford Co	13	26	3	11	2	12	1	61	55	13	12
73	Racine, Racine Co	75	240	74	51	24	72	3	72	72	139	102
74	Reedsburg, Sauk Co	10	30	2	9	1	10	...	68	68	8	9
75	Reedsville, Manitowoc Co	4	12	....	4	....	3	1	62	62	4	4
76	Rhinelander, Oneida Co	19	62	2	14	5	14	5	60	60	20	41
77	Rib Lake, Taylor Co	4	24	....	4	....	4	...	62	62	1	8
78	Rice Lake, Barron Co	5	21	....	5	....	4	1	61	61	8	15
79	Richland Center, Richland Co	10	27	2	8	2	8	2	60	60	6	8
80	Ripon, Fond du Lac Co	12	17	3	11	1	11	1	61	61	12	10
81	Seymour, Outagamie Co	5	15	1	5	....	5	....	60	60	4	5
82	Shawano, Shawano Co	6	16	2	6	....	5	1	75	72	3	6
83	Sheboygan, Sheboygan Co	55	119	55	50	5	53	2	61	60	53	73
84	Stanley, Chippewa Co	4	21	....	3	1	4	...	60	60	20	10
85	St. Croix Falls, Polk Co	5	9	....	4	1	3	2	60	60	3	3
86	Stevens Point, Portage Co	14	49	2	14	....	14	...	60	60	16	19
87	Stoughton, Dane Co	4	19	1	2	2	4	...	60	60	3	3
88	Soldiers Grove, Crawford Co	4	7	....	4	....	3	1	61	60	1	1
89	Sturgeon Bay, Door Co	11	30	....	10	1	10	1	64	58	12	17
90	Superior, Douglas Co	106	289	25	60	46	103	3	64	64	160	127
91	Tomahawk, Lincoln Co	10	16	....	5	5	10	...	62	62	6	19
92	Two Rivers, Manitowoc Co	8	43	7	7	1	7	1	60	60	9	17
93	Washburn, Bayfield Co	7	32	1	7	....	6	1	60	60	14	34
94	Waterloo, Jefferson Co	4	7	1	4	....	3	1	60	58	2	2
95	Watertown, Jefferson Co	28	72	19	24	4	28	...	60	60	32	35

BY CITIES AND TOWNS.—Continued.

Running number.	Horse Power.			Employees.						Improvements.		Wages paid in 1896.
					Date of Inspection.							
	Steam.	Water.	Electricity.	Full capacity.	Male	Female.	Total.	Between 14–18 years	Under 14 years.	On building.	On machinery.	
46	1,911	....	150	1,332	982	108	1,090	19	....	$2,300	$6,402	$25,000
47	1,567	....	....	978	651	67	718	44	....	39,500	4,350	247,846
48	390	....	....	140	94	.....	94	1	....	1,500	3,000	17,398
49	4,422	560	13	2,021	1,502	43	1,545	39	....	....	....	470,043
50	155	75	....	57	41	.....	41	.....	....	800	....	5,461
51	1,485	....	....	627	592	6	598	71	....	4,100	....	158,496
52	250	....	....	378	353	.....	353	18	....	1,200	8,[illegible]	33,582
53	936	....	....	144	116	5	121	3	....	700	985	43,252
54	420	....	....	225	193	2	195	6	....	....	50	86,050
55	152	75	....	36	7	.....	7	1	....	....	....	3,299
56	3,148	1,655	....	1,448	1,209	115	1,324	195	....	1,000	2,000	408,715
57	1,720	1,501	....	785	750	11	761	27	....	300	2,000	396,622
58	3,057	800	3	1,256	1,027	5	1,032	76	6	2,300	1,771	311,707
59	55,609	....	670	49,364	29,880	5,993	35,873	6,490	12	712,477	265,470	15,065,763
60	863	30	....	222	137	24	161	8	....	1,000	35,000	42,343
61	396	104	....	148	113	4	117	4	....	....	....	35,246
62	1,563	2,248	....	465	337	99	436	24	....	2,000	....	370,257
63	628	....	....	173	64	.....	64	18	....	....	....	14,960
64	861	....	2	389	276	3	279	34	....	20,000	27,000	62,438
65	2,083	....	95	545	185	4	189	.....	....	4,000	500	105,841
66	8,250	....	....	4,852	3,261	484	3,745	450	5	180,303	74,815	1,114,860
67	600	2	3	415	253	.....	253	15	....	....	4,300	111,400
68	326	....	8	185	107	38	145	19	....	....	....	40,989
69	462	....	....	256	108	6	114	9	....	....	....	64,644
70	226	....	17	330	131	149	280	20	1	....	....	83,000
71	90	....	....	685	569	49	618	57	....	9,300	9,000	183,184
72	470	....	....	245	96	27	123	13	....	10,700	1,800	26,932
73	7,303	....	68	7,326	4,558	723	5,281	306	....	50,953	64,094	1,696,529
74	351	93	7	230	111	49	160	5	....	520	6,920	44,806
75	160	....	....	77	56	.....	56	4	....	900	....	3,648
76	1,467	10	....	781	281	5	286	23	....	1,300	6,700	154,789
77	600	....	....	307	254	.....	254	4	....	....	....	96,141
78	785	500	....	416	289	.....	289	8	1	450	200	67,326
79	626	225	....	121	75	5	80	3	....	2,500	....	15,544
80	338	....	16	254	86	92	178	13	6	1,500	2,500	62,526
81	155	....	2	46	33	.....	33	3	....	....	....	6,240
82	95	300	....	93	38	2	40	.....	....	15,000	7,000	12,888
83	4,262	....	123	5,223	3,974	252	4,226	304	....	9,600	12,300	1,086,017
84	825	....	....	462	462	.....	462	25	1	....	....	128,594
85	115	22	....	54	8	.....	8	7	1	3,000	....	11,580
86	1,090	....	....	482	337	58	395	12	....	1,000	400	172,537
87	233	....	....	201	157	4	161	.....	....	....	1,500	48,708
88	50	40	....	63	26	.....	26	1	....	....	....	10,600
89	705	....	....	298	213	28	241	39	....	7,600	36,200	46,818
90	14,642	40	99	7,332	4,787	147	4,934	95	12	133,800	56,950	1,657,394
91	940	....	....	350	262	.....	262	14	....	....	....	88,220
92	1,285	....	....	860	630	10	640	101	....	500	....	191,400
93	1,390	....	....	731	460	.....	460	10	....	....	225	175,845
94	77	50	....	37	22	2	24	.....	....	....	....	10,854
95	1,754	300	....	744	477	59	536	61	....	....	....	163,294

TABLE II.—CLASSIFICATION

	Town, City and County.	No. of establishments.	Buildings.		Plant.				Hours per Week.		No. of engines.	No. of boilers.
			1 to 2 story.	3 or more stories.	Owned.	Leased.	Running.	Idle.	Average when running full time.	Average date of inspection.		
46	Madison, Dane Co.	42	92	23	26	16	40	2	61	61	27	31
47	Manitowoc, Manitowoc Co.	30	84	8	27	3	29	1	68	66	32	35
48	Marathon, Marathon Co.	7	14	....	7	....	5	2	62	62	7	11
49	Marinette, Oconto Co.	25	80	12	20	5	25	...	70	70	34	82
50	Marion, Shawano Co.	6	8	....	6	....	5	1	60	60	5	5
51	Marshfield, Wood Co.	18	70	4	17	1	18	...	68	68	19	32
52	Mattoon, Shawano Co.	5	16	....	5	....	5	...	65	65	3	5
53	Mayville, Dodge Co.	4	8	3	4	....	4	...	62	62	4	10
54	Medford, Taylor Co.	6	15	....	4	2	6	...	60	60	9	10
55	Mazomanie, Dane Co.	4	10	1	4	....	2	2	60	60	4	4
56	Menasha, Winnebago Co.	18	54	17	16	2	14	4	84	83	22	30
57	Menomonee, Dunn Co.	11	57	1	8	3	10	1	60	59	13	11
58	Merrill, Lincoln Co.	12	37	2	10	2	10	2	60	60	22	48
59	Milwaukee, Milwaukee Co.	636	994	535	365	271	627	9	59	59	666	349
60	Mineral Point, Iowa Co.	9	28	5	7	2	8	1	61	61	8	13
61	Monroe, Green Co.	15	24	2	6	9	14	1	60	60	10	12
62	Neenah, Winnebago Co.	15	33	9	11	4	15	...	95	95	18	21
63	Neillsville, Clark Co.	7	27	2	7	....	6	1	60	60	8	8
64	New London, Waupaca Co.	16	48	3	13	3	15	1	64	64	17	19
65	Oconto, Oconto Co.	14	41	3	12	2	11	3	62	60	18	30
66	Oshkosh, Winnebago Co.	75	150	28	54	21	68	7	61	58	94	120
67	Phillips, Price Co.	4	18	1	3	1	4	...	81	81	5	23
68	Platteville, Grant Co.	15	40	2	11	4	13	2	61	60	11	10
69	Plymouth, Pierce Co.	11	26	10	10	1	8	3	60	60	11	11
70	Portage, Columbia Co.	13	26	2	6	7	13	...	60	59	11	7
71	Port Washington, Ozaukee Co.	12	36	6	11	1	11	1	61	60	1	2
72	Prairie du Chien, Crawford Co.	13	26	3	11	2	12	1	61	55	13	12
73	Racine, Racine Co.	75	240	74	51	24	72	3	72	72	139	102
74	Reedsburg, Sauk Co.	10	30	2	9	1	10	....	68	68	8	9
75	Reedsville, Manitowoc Co.	4	12	....	4	....	3	1	62	62	4	4
76	Rhinelander, Oneida Co.	19	62	2	14	5	14	5	60	60	20	41
77	Rib Lake, Taylor Co.	4	24	....	4	....	4	...	62	62	1	8
78	Rice Lake, Barron Co.	5	21	....	5	....	4	1	61	61	8	15
79	Richland Center, Richland Co.	10	27	2	8	2	8	2	60	60	6	8
80	Ripon, Fond du Lac Co.	12	17	3	11	1	11	1	61	61	12	10
81	Seymour, Outagamie Co.	5	15	1	5	....	5	....	60	60	4	5
82	Shawano, Shawano Co.	6	16	2	6	....	5	1	75	72	3	6
83	Sheboygan, Sheboygan Co.	55	119	55	50	5	53	2	61	60	53	73
84	Stanley, Chippewa Co.	4	21	....	3	1	4	...	60	60	20	10
85	St. Croix Falls, Polk Co.	5	9	....	4	1	3	2	60	60	3	3
86	Stevens Point, Portage Co.	14	49	2	14	....	14	...	60	60	16	19
87	Stoughton, Dane Co.	4	19	1	2	2	4	...	60	60	3	3
88	Soldiers Grove, Crawford Co.	4	7	....	4	....	3	1	61	60	1	1
89	Sturgeon Bay, Door Co.	11	30	....	10	1	10	1	64	58	12	17
90	Superior, Douglas Co.	106	289	25	60	46	103	3	64	64	160	127
91	Tomahawk, Lincoln Co.	10	16	....	5	5	10	...	62	62	6	19
92	Two Rivers, Manitowoc Co.	8	43	7	7	1	7	1	60	60	9	17
93	Washburn, Bayfield Co.	7	32	1	7	....	6	1	60	60	14	34
94	Waterloo, Jefferson Co.	4	7	1	4	....	3	1	60	58	2	2
95	Watertown, Jefferson Co.	28	72	19	24	4	28	...	60	60	32	35

BY CITIES AND TOWNS.—Continued.

Running number.	Horse Power.			Employees.						Improvements.		Wages paid in 1896.
					Date of Inspection.							
	Steam.	Water.	Electricity.	Full capacity.	Male	Female.	Total.	Between 14-18 years	Under 14 years.	On building.	On machinery.	
46	1,911	....	150	1,332	982	108	1,090	19	....	$2,300	$6,402	$25,000
47	1,567	....	....	978	651	67	718	44	....	39,500	4,350	247,846
48	390	....	....	140	94	.....	94	1	....	1,500	3,000	17,398
49	4,422	560	13	2,021	1,502	43	1,545	39	....	....	....	470,043
50	155	75	....	57	41	.....	41	.....	....	800	....	5,461
51	1,485	....	....	627	592	6	598	71	....	4,100	....	158,496
52	250	....	....	378	353	.....	353	18	....	1,200	8,500	33,582
53	936	....	....	144	116	5	121	3	....	700	985	43,252
54	420	....	....	225	193	2	195	6	....	....	50	86,050
55	152	75	....	36	7	.....	7	1	....	....	....	3,299
56	3,148	1,655	....	1,448	1,209	115	1,324	195	....	1,000	2,000	408,715
57	1,720	1,501	....	785	750	11	761	27	....	800	2,000	396,622
58	3,057	800	3	1,256	1,027	5	1,032	76	6	2,800	1,771	311,707
59	55,609	....	670	49,364	29,880	5,993	35,873	6,490	12	712,477	265,470	15,065,763
60	863	30	....	222	137	24	161	8	....	1,000	35,000	42,343
61	396	104	....	148	113	4	117	4	....	....	....	35,246
62	1,563	2,248	....	465	337	99	436	24	....	2,000	....	370,257
63	628	....	....	173	64	.....	64	18	....	....	....	14,960
64	861	....	2	389	276	3	279	34	....	20,000	27,000	62,438
65	2,063	....	95	545	185	4	189	.....	....	4,000	500	105,841
66	8,250	....	....	4,852	3,261	484	3,745	450	5	180,303	74,815	1,114,860
67	600	2	3	415	253	.....	253	15	....	....	4,300	111,400
68	326	....	8	185	107	38	145	19	....	....	....	40,989
69	462	....	....	256	108	6	114	9	....	....	....	64,644
70	226	....	17	330	131	149	280	20	1	....	....	83,000
71	90	....	....	685	569	49	618	57	....	9,300	9,000	183,184
72	470	....	....	245	96	27	123	13	....	10,700	1,800	26.932
73	7,303	....	68	7,326	4,558	723	5,281	306	....	50,953	64.094	1,696.529
74	351	93	7	230	111	49	160	5	....	520	6,920	44,806
75	160	....	....	77	56	.....	56	4	....	900	....	3,648
76	1,467	10	....	781	281	5	286	23	....	1.300	6.700	154,789
77	600	....	....	307	254	.....	254	4	....	....	....	96,141
78	785	500	....	416	289	.....	289	8	1	450	200	67,326
79	626	225	....	121	75	5	80	3	....	2,500	....	15,544
80	338	....	16	254	86	92	178	13	6	1,500	2,500	62,526
81	155	....	2	46	33	.....	33	3	....	....	....	6.240
82	95	300	....	93	38	2	40	.....	....	15.000	7.000	12,888
83	4.262	....	123	5,223	3,974	252	4,226	304	....	9.600	12,300	1,086.017
84	825	....	....	462	462	.....	462	25	1	....	....	128.594
85	115	22	....	54	8	.....	8	7	1	3.000	....	11,580
86	1,090	....	....	482	337	58	395	12	....	1,000	400	172.537
87	233	....	....	201	157	4	161	.....	....	....	1,500	48.708
88	50	40	....	63	26	.....	26	1	....	....	....	10.600
89	705	....	....	298	213	28	241	39	....	7,600	36.200	46.818
90	14,642	40	99	7.332	4,787	147	4,934	95	12	133,800	56,950	1,657.394
91	940	....	....	350	262	.....	262	14	....	....	....	88,220
92	1.285	....	....	860	630	10	640	101	....	500	....	191.400
93	1,390	....	....	731	460	.....	460	10	....	....	225	175.845
94	77	50	....	37	22	2	24	.....	....	....	....	10,854
95	1,754	300	....	744	477	59	536	61	....	....	....	163.294

TABLE II.—CLASSIFICATION

	Town, City and County.	No. of establishments.	Buildings.		Plant.				Hours per Week.		No. of engines.	No. of boilers.
			1 to 2 story.	3 or more stories.	Owned.	Leased.	Running.	Idle.	Average when running full time.	Average date of inspection.		
96	Whitewater, Walworth Co......	7	14	2	6	1	7	...	60	60	8	8
97	Waupaca, Waupaca Co...........	13	41	2	10	3	11	2	64	64	6	5
98	Waupun, Fond du Lac Co.......	14	30	2	9	5	14	...	60	58	9	10
99	Wausau, Marathon Co...........	34	83	9	28	6	34	...	71	71	38	51
100	West Bend, Washington Co.....	7	19	7	5	2	7	...	68	68	10	8
101	West De Pere, Brown Co........	5	16	....	5	....	4	1	64	62	3	3
102	Weyauwega, Waupaca Co.......	4	11	4	4	....	3	1	66	66	....	1
103	Wittenberg, Shawano Co.........	5	13	2	5	....	3	2	61	46	4	6
104	Waukesha, Waukesha Co........	25	68	4	23	2	25	...	59	59	24	27
105	Other Places.......................	255	833	90	243	8	181	69	61	59	312	683
	Totals	2463	6043	1186	1843	620	2281	182	61.9	59.8	2661	3636

BY CITIES AND TOWNS.—Continued.

Running number.	HORSE POWER.			EMPLOYEES.						IMPROVEMENTS.		Wages paid in 1896.
					Date of Inspection.							
	Steam.	Water.	Electricity.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.	Under 14 years.	On building.	On machinery.	
96.......	339	70	....	47	26	4	30	.....	....	....	....	9,908
97.......	140	613	....	123	81	11	92	2	...	600	....	27,575
98.......	332	80	....	703	483	187	670	15	....	2,600	9,611	83,953
99.......	3,910	136	5	1,515	1,376	13	1,389	169	7	16,618	9,550	450,610
100.......	303	108	....	125	115	.....	115	6	....	400	....	40,837
101.......	106	....	....	71	35	.....	35	10	8	....	....	9,852
102.......	....	1,270	....	59	36	.....	36	.....	....	....	....	8,650
103.......	413	70	....	123	52	.....	52	2	....	....	12,000	6,500
104.......	1,166	4	2	575	454	14	468	26	3	8,250	33,000	173,178
105.......	65,381	8,760	301	14,591	11,497	185	9,875	166	13	107,577	94,604	2,898,728
Totals	230,786	32,195	1877	133,787	91,238	11322	102,560	9,041	79	$1695608	1115768	$35670640

TABLE III — CLASSIFICATION

	Town, City and County.	No. establishments.	Buildings.		Plant.				Hours Per Week		No. of engines.	No. of boilers.
			1 to 2 story.	3 or more stories.	Owned.	Leased.	Running.	Idle.	Average when running full time.	Average date of inspection.		
1	Agricultural Implements	37	152	35	34	3	36	1	59	57	41	46
2	Beef and Pork Packing	12	38	18	12	....	12	....	60	52	22	39
3	Beer and Malt	108	391	180	102	6	107	1	62	61	167	211
4	Bicycles	26	56	18	6	20	26	....	60	59	24	25
5	Boiler Works	18	28	4	15	3	16	2	59	50	15	15
6	Boots and Shoes	28	37	19	14	14	28	....	59	57	33	50
7	Boxes, "Packing"	20	52	1	18	2	17	3	56	53	18	26
8	Boxes "Paper and Cigar"	15	26	5	8	7	15	....	58	57	12	14
9	Brass Goods	12	30	4	8	4	12	....	58	55	17	14
10	Brick and Drain Tile	44	102	....	41	3	31	13	61	43	45	50
11	Butter	13	36	1	12	1	13	....	61	61	12	14
12	Baskets	5	15	1	4	1	4	1	60	57	3	5
13	Chairs and Chair Stock	18	63	45	18	....	17	1	58	56	25	43
14	Cigars	65	49	17	35	30	64	1	56	54	5	7
15	Clothing	31	24	22	8	23	31	....	58	56	18	13
16	Coffins and Burial Caskets	5	13	1	2	3	5	....	60	59	5	5
17	Confectionery and Bakeries	15	9	13	8	7	15	....	59	59	10	15
18	Cooperage	61	204	9	58	3	55	6	62	61	52	67
19	Cotton and Linen Mills	8	18	5	8	....	8	....	62	62	4	9
20	Coal and Wood	30	83	2	26	4	30	....	60	59	99	63
21	Distilled Medical Water	31	57	7	29	2	29	2	60	55	20	29
22	Drugs and Chemicals	6	8	2	2	4	6	....	60	60	4	3
23	Elec. Light Power and St. Rys.	73	168	1	72	1	73	....	89	89	153	189
24	Flour and Feed	142	259	118	133	9	132	10	78	78	121	157
25	Furniture and Upholstery	58	143	48	50	8	50	8	58	56	61	78
26	Furs, Gloves and Mittens	16	11	9	10	6	15	1	58	58	8	5
27	Grain Elevators	18	36	13	15	3	18	....	69	69	28	38
28	Hardware Specialties	5	11	6	4	1	5	....	60	[illegible]	4	6
29	Interior and Exterior Wood Work	21	40	8	14	7	20	1	68	53	15	18
30	Iron Works (Malleable)	11	30	12	10	1	11	....	66	61	9	12
31	Knit Goods	20	28	12	13	7	19	1	58	57	19	20
32	Laundries	106	106	22	30	76	106	....	60	59	97	99
33	Leather	45	157	62	43	2	45	....	61	60	82	133
34	Lithographing and Engraving	12	3	13	1	11	12	....	54	54	7	9
35	Lumber, Lath and Shingles	343	1269	33	331	12	262	81	63	60	510	1063
36	Machine Shops, Foundries, Etc.	125	390	36	100	25	124	1	59	51	122	127
37	Mattresses and Bedding	13	22	11	7	6	13	....	58	55	11	11
38	Paints, Oil and Greases	13	21	8	7	6	10	3	64	53	13	14
39	Paper and Pulp	48	208	39	46	2	45	3	134	131	57	161
40	Printing, Pub. and Book Binding	224	167	72	66	158	224	....	59	59	117	55
41	Railway Shops	23	128	2	22	1	23	....	59	58	35	56
42	Refrigerators	6	17	4	5	1	4	2	60	60	13	17
43	Saddlery, Harness and Whips	14	14	11	7	7	10	4	60	60	11	6
44	Sash, Doors and Blinds	74	248	32	65	9	70	4	59	58	90	108
45	Sewer Pipe and Cement	6	15	6	5	1	6	....	60	58	7	9

BY INDUSTRIES.

Running number.	Horse Power.			Employees.						Improvements.		Wages paid in 1898.
					Date of Inspection.							
	Steam.	Water.	Electricity, etc.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.		On building.	On machinery.	
1	3,148	145	10	3,608	2,822	2	2,824	85	....	$8,325	$10,282	$970,838
2	1,655	....	....	1,811	1,252	.....	1,252	14	....	....	17,000	666,012
3	12,212	42	50	4,222	3,304	375	3,679	350	....	450,635	111,578	1,930,832
4	1,279	....	50	2,381	1,774	1	1,775	184	....	13,200	35,150	720,400
5	417	....	....	681	302	.....	302	12	....	4,998	8,500	131,351
6	1,734	715	....	3,331	2,569	267	2,836	350	....	90,750	40,000	1,092,367
7	1,790	90	....	929	765	2	767	149	....	2,500	2,250	178,457
8	473	....	14	709	335	331	666	144	....	11,000	3,017	144,752
9	616	....	....	584	408	9	417	13	....	4,500	7,500	156,696
10	2,295	....	....	1,397	955	.....	955	59	....	7,250	5,000	225,372
11	181	....	....	69	58	2	60	11	....	500	6,750	22,889
12	345	....	....	151	122	.....	122	22	....	....	....	28,875
13	3,175	25	....	3.837	2,949	307	3,256	379	....	12,000	12,000	763,625
14	373	....	1	1,546	912	387	1,299	207	....	300	....	407,529
15	416	....	63	1,857	346	833	1,179	134	....	548	2,104	669,227
16	195	....	....	121	106	11	117	5	....	2,400	5,500	37,084
17	477	....	....	1,061	355	421	776	277	....	200	500	232,559
18	3,739	1,000	....	2,949	2,391	2	2,393	393	....	11,575	....	678,364
19	760	813	....	710	261	360	621	66	....	22,075	32,650	129,502
20	4,566	....	....	2,271	1,669	.....	1,669	3	....	....	....	722,408
21	459	....	15	471	277	20	297	38	....	8,250	9,000	137.039
22	123	350	3	79	46	18	64	4	....	16,200	15,500	22,201
23	20,901	3,380	....	958	901	5	906	1	....	82,196	191,550	459,806
24	14,639	4,852	73	1,605	1,220	14	1,234	6	....	19,250	19,450	641,479
25	4,956	....	....	4,416	3,149	35	3,184	425	....	31,493	18,862	945,461
26	91	....	14	636	132	260	392	65	....	....	....	162,665
27	4,969	80	....	381	323	.....	323	.....	....	800	25,000	142,226
28	327	....	10	487	357	.....	357	46	....	2,000	8,800	155,560
29	953	....	30	734	402	.....	402	26	....	1,600	2.500	159,643
30	581	....	....	1,692	1,227	3	1,230	163	....	18,000	4,707	389,211
31	709	5	10	2,584	248	2,027	2,275	687	....	....	....	427,883
32	1,306	....	14	1,506	324	821	1,145	48	....	19,900	18,665	283,210
33	4.977	790	3	5,600	4.615	282	4,897	183	....	120,250	62,000	1,874.429
34	370	28	....	579	506	39	545	100	....	55,000	10,000	267,332
35	67.324	11,075	30	24,398	17,949	113	18,062	1,080	....	251,674	73,171	5,309,002
36	4,829	386	165	7,495	5,271	27	5,298	106	....	21,250	28,800	1,722,081
37	796	....	..16	726	516	76	592	145	....	2,400	1,100	270,973
38	537	....	....	238	208	1	209	23	....	4,000	....	79,054
39	11,792	6,015	....	3.958	2,779	710	3.489	82	....	123,000	145,000	1,409,173
40	1,177	54	382	3.270	2,508	509	3,017	235	....	60,600	46,510	1,273,056
41	2,348	....	50	4.147	3,910	.....	3.910	9	....	....	....	1,510,095
42	1,350	....	....	854	636	10	646	106	....	14,800	12,662	122,191
43	174	....	16	528	242	207	449	139	....	400	75	131.287
44	7,947	131	35	6.297	4,652	40	4,692	550	....	62,775	28,647	1,389,344
45	920	....	....	308	174	.....	174	1	....	1,000	....	64,176

TABLE III.—CLASSIFICATION

	Town, City and County.	No. establishments.	Buildings.		Plant.				Hours per Week.		No. of engines.	No. of boilers.
			1 or 2 stories.	3 or more stories.	Owned.	Leased.	Running.	Idle.	Average when running full time.	Average date of inspection.		
46	Ship Building	11	47	1	10	1	10	1	60	58	24	18
47	Soap, Lye and Potash	10	8	4	9	1	10	....	59	57	9	12
48	Stone (Cut and Quarried)	23	42	2	21	2	22	1	59	58	26	28
49	Stoves and Ranges	10	27	10	7	3	10	....	60	55	9	9
50	Sheet Metal Work and Tin Ware	19	31	12	12	7	10	9	59	58	6	14
51	Trunks	10	10	14	7	3	8	2	59	55	8	11
52	Vinegar, Pickles and Yeast	12	27	5	9	3	12	....	59	53	11	21
53	Veneer	8	34	4	8	....	8	....	60	60	10	11
54	Wagons, Carriages and Sleighs	89	236	49	78	11	88	1	59	56	45	55
55	Willow Ware and Toys	4	8	5	4	....	4	....	59	59	4	5
56	Windmills, Pumps and Tanks	10	45	....	9	1	8	2	60	57	10	11
57	Wooden Ware	6	28	....	6	....	6	....	60	60	11	15
58	Woolen and Worsted Mills	19	63	14	19	....	16	3	60	60	19	27
59	Brooms and Brushes	13	12	2	10	3	13	....	60	53	1	1
60	Miscellaneous	195	443	79	110	85	182	13	62	61	227	244
	Totals	2463	6043	1186	1843	620	228	182	62	596	2661	3636

BY INDUSTRIES.—Continued.

Running number.	HORSE POWER.			EMPLOYEES.						IMPROVEMENTS.		Wages paid in 1896.
					Date of Inspection.							
	Steam.	Water.	Electricity, etc.	Full capacity.	Male.	Female.	Total.	Between 14 and 18 years.		On building.	On machinery.	
46........	924	....	....	2,131	768	.....	768	8	....	$2,075	....	$476,276
47........	205	....	....	169	111	48	159	27	....	....	....	58,473
48........	1,340	....	....	1,264	464	1	465	4	....	5,552	$1,445	203,977
49........	550	....	24	1,116	843	6	849	85	....	....	....	318,697
50........	1,080	....	258	1,745	1,141	408	1,549	699	....	....	....	546,426
....	470	....	....	1,134	705	101	806	162	....	15,000	6,000	176,300
52........	587	....	....	354	195	59	254	64	....	4,100	15,500	101,272
53........	939	....	....	468	412	8	420	60	....	12,600	9,000	123,534
54........	2,540	59	50	3,701	2,724	54	2,778	108	....	8,900	6,486	913,914
55........	150	175	....	533	311	33	344	97	....	4,500	700	76,286
56........	452	50	10	410	274	.....	274	12	....	1,537	5,900	90,523
57........	1,125	1,000	....	982	948	.....	948	220	....	850	2,000	344,140
58........	1,165	725	....	1,401	570	634	1,204	261	....	8,950	1,100	284,102
59........	....	....	1	99	57	.....	57	19	....	....	....	18,278
60........	17,659	210	480	10,058	5,488	1,443	6,931	990	....	81,950	50,857	2,680,526
Totals	230,786	32,195	1877	133737	91,238	11322	102,560	9,041	....	$1695608	1115768	$35670340

ANALYSIS.

The foregoing tables under "General Inspection" are compiled from the reports of the inspection of 2,463 factories and workshops in this state.

The tabulations consist of three tables. Of these the first (I.) shows under the name of the city or place where located the condition with reference to the factory laws of each establishment inspected. The second (II.) and third (III.) tables, respectively, show, of the most important data in table I., the aggregates by cities and industries. These aggregates are again presented in the following table:

AGGREGATES TABLES II AND III.

Total number of establishments inspected	2,463
Buildings—number 1 and 2 stories high	6,043
Buildings—number 3 or more stories high	1,186
Plants—number owned	1,843
Plants—number leased	620
Plants—number in operation time of inspection	2,281
Plants—number idle time of inspection	182
Average hours per week when running full time	62
Average hours per week time of inspection	59.5
Number of engines	2,661
Number of boilers	3.636
Horse power—steam	230,786
Horse power—water	32,195
Horse power—elec., gas	1,877
Employees—full capacity	130.737
Employees—male, date of inspection	91,238
Employees—female, date of inspection	11.322
Employees—total, date of inspection	102,560
Employees—between 14 and 18 years of age	9,041
Employees—under 14 years of age	79
Improvements on buildings	$1,695.608
Improvements on machinery	$1.115.768
Wages—amount paid in 1896	$35,670,340

The above table shows, that at the general insection 2,463 plants or establishments were inspected; that the total number of buildings wholly or partly occupied or used by these plants was 7,229; that in 1,843 cases the plants were owned, and in 620 cases the plants were leased by the parties operating them; that 2,281 plants were in operation and 182 were idle at the time of inspection; that the weekly average number of working hours when running full time was 62, and at the time of inspection 596; that 2,661 engines and 3,636 boilers were used; that the motive power employed was: steam 230,786 horse power; water, 32,195 horse power, and electricity, gas and naphtha, 1,877 horse power; that as to employees the full capacity of these plants was 133,737; that, at the time of inspection, 91,238 male, 11,322 female or a total of 102,560 wage earners were employed; that of these 9,941 were between fourteen and eighteen years of age and 79 under fourteen years of age; that the improvements on buildings amounted to $1,695,608 and on machinery to $1,115,768, and that wages paid in 1896 by the above plants amounted to $35,499,840.

Below is presented in the order of their importance in this respect the different cities in the state in which 25 establishments or more were inspected:

CITIES HAVING THE LARGEST NUMBER OF ESTABLISHMENTS.

City or Place of Location.	Establishments.	Percentage.
Milwaukee	636	25.82
Superior	106	4.30
La Crosse	76	3.09
Oshkosh	75	3.08
Racine	75	3.08
Green Bay	60	2.43
Sheboygan	55	2.23
Appleton	48	1.95
Madison	42	1.70
Eau Claire	39	1.58
Fond du Lac	35	1.41
Beloit	34	1.38
Wausau	34	1.38
Janesville	33	1.33
Manitowoc	30	1.21
Watertown	28	1.13
Ashland	26	1.05
Marinette	25	1.01
Waukesha	25	1.01
Other places	961	39.88
Aggregates	2,463	100.00

In above table we find the number of establishments and the proportion of these of the total in each one of nineteen cities in which the greatest number were inspected. Milwaukee leads all other places. In this city alone 636 establishments were inspected. This is 25.82 per cent., or more than one-fourth of the aggregate for the state. From this down, to the limit set, the order is as follows: Superior, La Crosse, Oshkosh, Racine, Green Bay, Sheboygan, Appleton, Madison, Eau Claire, Fond du Lac, Beloit, Wausau, Janesville, Manitowoc, Watertown, Ashland, Marinette, and Waukesha. Of these Superior leads with 106 establishments. From this point the decrease is gradual down to Marinette and Waukesha where only 25 places in each case were inspected.

Classified as to the proportions of the total the following appears: Milwaukee alone practically covers 26 per cent. of the total places inspected. The other places enumerated above or cities in which 25 or more inspections were made cover 34.35 per cent.; while places in each of which less than 25 establishments were inspected cover 39.85 per cent. of the total for the state.

In the following table those industries are presented in each of which 25 or more establishments are inspected:

INDUSTRIES HAVING THE LARGEST NUMBER OF ESTABLISHMENTS.

Industries.	Establishments.	Percentage
Lumber	343	13.93
Printing and publishing	224	9.09
Flour and feed	142	5.77
Machine shops and foundries	125	5.07
Beer and malt	108	4.38
Laundries	106	4.30
Wagons and carriages	89	3.62
Sash, doors and blinds	74	3.00
Electric light, power and street railway	73	2.96
Cigars	65	2.64
Cooperage	61	2.48
Furniture and upholstery	58	2.35
Paper and pulp mills	48	1.95
Leather	45	1.83
Brick and drain tile	44	1.79
Agricultural implements	37	1.50
Clothing	31	1.26
Coal and wood	31	1.26
Bicycles	26	1.06
Other industries	733	29.76
Aggregate	2,463	100.00

As said this table includes all industries in the state in which 25 or more establishments were inspected. Lumber, etc., shows the greatest number, or 343 establishments. Next in order with 224 establishments we find Printing and Publishing. Machine Shops and Foundries show 125, Beer and Malt 108 and Laundries 106 establishments, respectively. In the order of their importance the remaining industries in the table stand as follows: Wagons, Carriages, etc., Sash, Doors and Blinds, Electric Light and Power, Cigars, Cooperage, Furniture, etc., Paper and Pulp, Leather; Brick and Tile, Agricultural Implements, Clothing, Coal and Wood, and Bicycles. The first of these, Wagons, etc., shows 89, the last, or Bicycles, shows 26 establishments. In these nineteen industries therefore the decrease in importance is gradual.

BUILDINGS.—The tables show that the 2,463 establishments inspected either wholly or partly occupied 7,229 buildings. This is equivalent to an average of 2.93 buildings to each establishment. Of the buildings thus occupied or used 6,043 or 83.59 per cent. were one or two stories high, while 1,186 or 16.41 per cent. were three or more stories in height. Milwaukee, which has 26 per cent. of the establishments, or the largest by far of any manufacturing center in the state, also has the largest number of buildings, or 1,529, equal to about 21.15 per cent. of the total. Next in order are Superior and Racine with about 314 buildings each. In the classification as to industries Lumber ranks the highest, having 1,302 buildings or 18.15 per cent. of the total. Lumber is also the largest industry in the state. Beer and Malt, while only having 4.38 per cent. of the establishments comes next with 516 buildings or 7.76 per cent. of the total. On the whole the proportion of buildings to the number of establishments does not vary greatly, in the remaining industries, from these figures.

OWNED OR LEASED.—Of the establishments 1,843 or 78.09 per cent. were owned by the parties operating them while 620 or 21.91 per cent. were leased. The relative number in each case vary greatly not only between the different industries but also as between the cities. While no particular explanation can be offered for this, it would appear from an examination of tables I, II and III that industries which are, comparatively speaking, new and also those that produce on a smaller scale are mostly carried on in leased quarters. The value of the land also seems to have some effect in this respect. Comparisons of the tables mentioned will suggest these and many other reasons and will therefore be found interesting. As a rule, however, no general cause can be given that will apply to more than a limited number of establishments.

RUNNING AND IDLE.—The tables show that of the 2,463 establishments inspected 2,281 or 92.60 per cent. were in operation and that 182 establishments or 7.40 per cent. were idle at the time of inspection. The proportion of idle to those in operation is very irregular both as between industries and localities. As besides this, no particular reasons were given for the fact that the plants happened not to be in operation there is little to be said on this point. It is likely, however, that as many inspections were made during such parts of the seasons when repairs are mostly made, or when many industries find it the most convenient to shut down, temporarily, or for these other reasons, the idleness can be easily accounted for.

HOURS IN OPERATION.—The average hours in operation weekly when running full time is seen to be 62 and the average at the time of inspection is 59.4 hours per week. These figures, however, do not represent the average length of what may be considered the actual working day. The reason for this is, that in the figures given all overtime, and night work, was included. In both cases, however, the actual time in operation for each establishment is shown in table I.

MOTIVE POWER.—We see from the table that the establishments inspected utilized 2,661 Engines and 3,636 Boilers having a capacity of 230,786 horse-power. This is equal to about 64 horse-power to each Boiler. Water-power to the extent of 32,195 horse-power were also used. Steam-power was, of course, used in all industries and generally varied in amount with the importance of the industry. Water-power was used to any great extent only in Boots and Shoes, Cooperage, Cotton Mills, Electric Light Plants, Flour and Feed, Leather, Lumber, Paper and Pulp, Woodenware, and Woolen and Worsted Mills. Only 1,877 horse-power of electricity and gas were used for motive power.

PERSONS EMPLOYED.—Under this head the tables show that the number of hands required when the 2,463 establishments included were running to their full capacity was 133,737; that at the time of inspection they only employed 102,560 or 76.68 per cent. of their full capacity. The same tables also show that of the 102,560 thus employed, 91,238 persons or 88.96 per cent. were male and 11,322 persons, or 11.04 per cent. were female;

that 9,941 persons, or 9.69 per cent. were between fourteen and eighteen years of age and that 79 were under fourteen years of age.

The following presentation shows the proportion of their capacity to which the establishments in industries employing 1,000 or more persons were employed at the time of inspection:

PROPORTION EMPLOYED OF FULL CAPACITY FOR EMPLOYMENT.

Industries.	No. of establishments.	Full capacity of establishm'ts	Employes.	Per cent.
Lumber, lath and shingles	343	24,398	18,062	74.03
Machine shops, etc	125	7,495	5,298	70.68
Leather	45	5,600	4,897	87.44
Sash, doors and blinds	74	6,297	4,692	74.51
Railway shops	23	4,147	3,910	94.28
Beer and malt	108	4,222	3,679	87.14
Paper and pulp	48	3,958	3,489	88.15
Chairs and chair stocks	18	3,837	3,256	84.85
Furniture	58	4,416	3,184	72.10
Printing, publishing and book binding	224	3,270	3,017	92.26
Boots and shoes	28	3,331	2,836	85.14
Agricultural implements	37	3,608	2,824	78.27
Wagons, carriages and sleighs	89	3,701	2,778	75.06
Cooperage	61	2,949	2,393	80.47
Knit goods	20	2,584	2,275	88.04
Bicycles	26	2,381	1,775	74.55
Coal and wood	30	2,271	1,669	73.49
Sheet metal goods	19	1,745	1,549	88.76
Cigars	65	1,546	1,299	84.02
Beef and pork packing	12	1,811	1,252	69.13
Flour and feed	142	1,605	1,234	75.01
Iron goods, malleable	11	1,692	1,230	72.69
Woolen and worsted mills	19	1,401	1,204	85.94
Clothing	31	1,857	1,179	63.49
Laundries	106	1,506	1,145	76.02
Other industries	701	32,119	29,434	70.03
	2,463	133,737	102,560	76.68

The above presentation shows for the industries included the number of establishments considered, the full capacity of employes, the number of persons employed at the time of inspection, and the percentage of the persons employed, when inspected, of the total capacity for employment. The industries are presented in the order of their importance with regard to the number employed at the time of inspection.

Twenty-five industries are included. Of these Lumber, etc., is easily in the lead. Examining the table we find that this industry alone had 343 establishments, or nearly 14 per cent. of those inspected; that it had capacity for 24,398 persons, or over 18 per cent. of the total capacity for the state; and that at the time of inspection it employed 18,062 persons, or nearly 18 per cent. of the total number employed. From this there is a rapid descent, particularly in the number of persons employed. Machine Shops, etc., show the next highest number of employes, or 5,298. Compared with Lumber this aggregate appears small, being only about 29 per cent. thereof. Leather and Sash, Doors and Blinds employed 4,897 and 4,692 persons respectively. Of the remaining industries six employed over 3,000 but less than 4,000 persons, five employed over 2,000 but less than 3,000 persons, and ten employed over 1,000 but less than 2,000 persons each. As to the number of establishments and capacity of same the order is not quite the same. The variations, however, are easily seen and need no further explanations.

Of the aggregate capacity for employment 76.68 per cent. are seen to have been employed at the time of inspection. The proportion employed varies as between the different industries. The highest and lowest are represented by Railway shops and Clothing Manufacture, the former employing 94.28 out of every 100 persons of its capacity, the latter only 63.49 of every 100 persons of its capacity. These two industries thus represent the extremes between which the proportion in the other industries will be found.

It should perhaps be repeated here that by full capacity is meant the greatest number of persons that could possibly be employed in these plants. While no data was gathered upon this point, it is very likely that the standard in the number of employes, which was usually regarded as the full capacity was, in most cases, somewhat lower than the aggregate shown. If such is the case, it also follows that the difference between the full capacity as shown and the actual number employed, instead of measuring the exact proportion to which the plants fell short of full employment, in the sense in which this term is used, only indicates that, as a whole, the aggregate capacity was not employed.

The following table shows the number of establishments, their capacity for employment and the number and proportion of this capacity actually employed at the time of inspection, for each city in the state in which 1,000 or more persons were employed.

PROPORTION OF FULL CAPACITY EMPLOYED.

Cities.	Establishments.	Full capacity of establishm'ts.	Persons employed.	Per cent.
Milwaukee	636	49,364	35,873	72.67
Racine	75	7,326	5,281	72.08
Superior	106	7,332	4,934	67.29
Sheboygan	55	5,223	4,226	80.91
Oshkosh	75	4,852	3,745	77.18
La Crosse	76	3,895	2,948	75.68
Kenosha	20	2,512	2,174	86.54
Eau Claire	39	2,147	1,855	86.40
Marinette	25	2,021	1,545	76.44
Green Bay	60	1,735	1,410	81.27
Wausau	34	1,515	1,389	91.69
Beloit	34	1,652	1,373	83.11
Menasha	18	1,448	1,324	91.43
Appleton	48	1,705	1,306	76.59
Janesville	33	1,393	1,162	83.41
Fond du Lac	35	1,318	1,128	85.58
Madison	42	1,332	1,090	81.83
Merrill	12	1,256	1,032	81.16
Other places	1,040	35,711	28,765	80.55
	2,463	133,737	102,560	76.68

In the preceding table it appears that in 18 cities the factories, etc., inspected employed each 1,000 or more persons. From a manufacturing point of view these cities are of considerable importance. Comparing their aggregates with the aggregates in the same respects, for the state, we find that they cover 58 per cent. of the establishments, 73 per cent. of the employing capacity and 72 per cent. of the persons employed. Another striking fact appears from this comparison. The cities included were found to embrace 58 per cent. of the establishments and 73 per cent. of the employes for the state. The proportion of the establishments included is therefore much lower than the proportions of the employing capacity and persons employed. This difference indicates that the establishments located in the above cities are considerably above the average in the point of productive capacity.

The cities are presented in the order of their importance as to the number of persons employed. Milwaukee is by far the largest manufacturing center in the state and therefore heads the list. Of the establishments, that city alone covers 45 per cent. of the aggregate for the 18 cities and 26 per cent. of the aggregate for the state. Of the employing capacity it covers 50 per cent. of that for the cities named and 37 per cent. of the aggregate for the state. Of the persons employed it shows 49 per cent. for the places included and 35 per cent. of the aggregate for the state. Milwaukee alone thus embraces 26 per cent. of the establishments, 37 per cent. of the employing capacity, and 35 per cent. of the persons employed, for the state. These facts show, perhaps, better than it could be presented in any other way, the importance of Milwaukee as a manufacturing center.

In table III we find the number of male and female and the number of persons 18 years of age or under employed in the different industries. No effort, however, was made in that table to present the proportion in each case in percentages. This method of expressing relations is often the best. Not only does it seem to increase the meaning of such facts, but they become plainer and more adaptable to future use and comparison. For these reasons the percentage in each case for each one of the industries included was ascertained and shown separately in the following table:

EMPLOYES: PERCENTAGE OF MALE, FEMALE AND UNDER 18 YEARS OF AGE IN DIFFERENT INDUSTRIES.

Industries.	Percentage of male persons employed.	Percentage of female persons employed.	Percentage under 18 years of age.
Agricultural implements	100.	....	3.01
Beef and pork packing	100.	....	1.11
Beer and malt	89.80	10.20	9.61
Bicycles	100.	....	10.36
Boiler works	100.	....	3.97
Boots and shoes	90.59	9.41	12.34
Boxes, packing	100.	....	19.42
Boxes, paper and cigar	50.30	49.70	21.63
Brass goods	100.	....	3.11
Brick and drain tile	100.	....	6.17
Brooms and brushes	100.	....	33.33
Butter	96.67	3.33	1.53
Baskets	100.	....	18.03
Chairs and chair stock	90.57	9.43	11.64
Cigars	70.21	29.79	15.93
Clothing	29.34	71.66	11.36
Coffins and burial caskets	90.60	9.40	4.27
Confectionery and bakeries	45.75	54.25	35.70
Cooperage	100.	....	16.37
Cotton and linen goods	42.03	57.97	10.62

EMPLOYEES: PERCENTAGE OF MALE, FEMALE AND UNDER 18 YEARS OF AGE IN DIFFERENT INDUSTRIES.—Continued.

Industries.	Percentage of male persons employed.	Percentage of female persons employed.	Percentage under 18 years of age.
Coal and wood	100.	....	0.17
Distilled medical water	93.26	6.74	12.79
Drugs and chemicals	71.87	28.13	6.25
Electric light, power and street railway	99.45	0.55	....
Flour and feed	98.87	1.13	0.40
Furniture and upholstery	98.86	1.14	13.35
Furs, gloves and mittens	33.67	66.33	16.58
Grain elevators	100.	....	....
Hardware specialties	100.	....	12.89
Interior and exterior wood work	100.	....	6.46
Iron works, (malleable)	100.	....	13.25
Knit goods	10.90	89.10	30.20
Laundries	28.30	71.70	4.19
Leather	94.65	5.35	3.73
Lithographing and engraving	91.01	8.99	18.35
Lumber, lath and shingles	99.30	0.70	5.98
Machine shops and foundries	99.28	0.72	2.00
Mattresses and bedding	87.16	12.84	24.48
Miscellaneous	79.47	20.53	14.27
Paints, oils and greases	100.	....	11.00
Paper and pulp	79.65	20.35	2.35
Printing, publishing and book binding	83.12	16.88	7.78
Railway shops	100.	....	0.23
Refrigerators	98.45	1.55	16.71
Saddlery, harness and whips	53.90	46.10	30.95
Sash, doors and blinds	99.14	0.86	11.72
Sewer pipe and cement	100.	....	0.52
Ship building	100.	....	1.03
Soap, lye and potash	69.81	30.19	16.98
Stone, (cut and quarried)	100.	....	0.86
Stoves and ranges	99.29	0.71	10.01
Sheet metal work and tinware	73.66	26.34	45.12
Trunks	87.47	12.53	20.09
Vinegar, pickles and yeast	76.77	23.23	25.19
Veneer	98.09	1.91	14.29
Wagons, carriages and sleighs	98.05	1.95	3.81
Willowware and toys	90.41	9.59	28.19
Wind mills, pumps and tanks	100.	....	4.38
Woodenware	100.	....	23.20
Woolen and worsted mills	47.34	52.66	21.67
	88.60	11.40	9.69

This table shows the proportion of male, female and persons under 18 years of age that were employed in each industry. We have seen already that the aggregate persons employed in all industries was 102,560; that of these 91,238 were males, 11,322 were females, and that 9,941 were between 14 and 18 years of age. This is equivalent to 88.60, 11.40 and 9.90 per cent. respectively. As to the proportion of male and females the variation between the different industries is great. In some the majority are females, in others males only are employed. Thus there were eight industries in which about 50 per cent., or more, were females, while on the other hand, there were twenty-two industries in which no female help to speak of was employed. In industries employing female help to the extent that it was taken into account here, the highest proportion, or 89.10 per cent. of the whole, was found in Knit Goods, and the lowest, or .71 per cent., was found in Stoves, etc. In nine industries the proportion of females is less than 50 but more than 20 per cent., while in twenty-two the proportion is less than 20 per cent.

All industries except Grain Elevators and Electric Light or Power Plants employed children or persons 18 years of age or under. The proportion, however, varied greatly in the different cases. In Sheet Metal goods, for instance, it was 45.12 and in Coal and Wood .17 per cent. The first of these is also the highest for all the industries, while the last is the lowest. Between these, or the highest and lowest proportions, there are great variations in this respect. Thus, there are five industries below the highest in which the proportion is over 30 per cent. and eight more in which it is between 20 and 30 per cent. In twenty-one of the industries the proportion varies from 10 to 20 per cent. While in twenty-four it is less than 10 per cent. of the whole. The largest proportion of young persons were invariably found in the larger manufacturing centers such as Milwaukee, Oshkosh, Racine, and other cities of this class.

IMPROVEMENTS.—According to the returns or facts presented there was $2,811,376 expended for general improvements on the different plants inspected during the period covered. Of this amount $1,695,608 or 60.31 per cent. was expended on Buildings and $1,115,768, or 39.69 per cent. on Machinery. Table I shows the amount expended for these purposes by the different plants. Tables II and III show, respectively the total amount expended in each city and for each industry.

The original intention was to include, under "Improvements," only such expenditures as had been made for the extension of the plants and for replacing old machinery and buildings. It appeared from the reports, however, that in many cases the amount given also included ordinary repairs. As the different items could not be separated, the figures given above cannot, strictly speaking, be said to represent new improvements only.

WAGES.—As explained already, the inspectors obtained from each one of the establishments inspected the amount paid in wages during the next preceding year. While the wages for each establishment was thus reported it was thought best not to give these figures in detail. For each city or place inspected and for each industry represented by four or more establishments the total amount of the wages paid has been shown separately.

From tables II and III we find that the amount of wages paid during the year in question was $35,670,340. It was the aim of this department to reach every establishment in the state in which 5 or more persons were employed, no matter where located. In this, however, we were not quite successful. The industries in this state are pretty well scattered. Many plants are located in small and out of the way places, often several miles from any railroad. While many such plants were visited there were also some which could not be reached. These latter are, of course, not included. The reports of the factory inspectors, therefore, do not quite amount to a census of the manufacturers of this state. The figures presented, however, cover, by far, the larger proportion of the manufacturing capacity. This may be seen by a comparison of the aggreate number of persons employed and the amount of wages paid by the establishments inspected, with the corresponding figures, as shown in the census of 1895. The census shows that 118,117 persons were employed in the factories, etc., in this state and that these were paid $42,882,886 in wages. The inspection embraces 102,560 persons, or 87.79 per cent. of the total for the census and shows that $35,670,340, or 88.33 per cent. of the amount for the census was paid them in wages. The establishments included in the inspection are also, as is plain, the best equipped and most productive and while the indications from the above figures are that they embrace about 88 per cent. of the total for the state their productive capacity is in reality considerably above this percentage.

Table II. shows the amount of wages paid in the different cities or places inspected. These places are presented in alphabetical order. As regards the amount paid, Milwaukee is ahead. In this city alone $15,065,763, or 42.24 per cent. of the total for the state was paid in wages. Next in order is Racine, West Superior, Oshkosh, La Crosse, and Sheboygan. In each one of these five cities the wage roll varied from somewhat over one million to one million seven hundred thousand dollars. The total wages paid in the six cities mentioned amounted to about 61 per cent. of the total included. In Kenosha nearly one million and in Eau Claire over five hundred thousand were paid in wages. Six other cities paid over four hundred thousand and in another six over three hundred thousand were paid. In the above 20 cities $27,978,806, or over 78 per cent. of the total for the state constituted, according to table II, the total wage-roll.

The wages paid has also been classified as to industries. This classification is presented in table III. As in the case of cities or places inspected, the industries are given in alphabetical order. In studying this table it is found that Lumber, etc., is by far the largest industry in the state. The expenditures for labor in this industry alone amounted to $5,309,002, or about 15 per cent. of the aggregate wages for all industries. In all the other industries the wages paid was considerably less than this. In eight, however, the amount varied from about one to about two millions and, taken together, amounted to $12,201,377, or about 34 per cent. of the whole. Eleven other industries, in which the respective amounts varied from about one-half to about one million, paid $8,238,154, or 23 per cent.; and again, seven others, each of which paid less than a half million, show an aggregate wage of $2,823,542, or about 8 per cent. of the aggregate. In 27 industries therefore, or less than one-half of all included, $28,572,075, or practically 80 per cent. of the aggregrate for all industries was paid in wages.

INDEX TO MANUFACTURERS.

In the following table is given a list of the factories visited and reported upon by the inspectors in 1897 and 1898. Each firm has been given an office number for convenience and to save space. This table furnishes the key to the orders, accidents, etc., reported. Every accident and order has a number corresponding to the one before the firm name in this table. Thus by referring to the names and number given below it is possible to tell what factory the order or accident was reported from and space is saved by publishing the firm name in this table only and representing it by its respective number in the tables which relate to the factory inspection. This table, besides giving the name of every firm visited by the inspectors, gives the location by town or city; the kind of goods made; when the factory was established and date of inspection. The 2,463 factories shown in this list were all reported upon at length by the inspectors and these reports have been made the basis for other tables. Many of the larger establishments were visited every few months in order to keep close watch on child labor. Nearly 200 more factories were inspected during the two years covered here than during the biennial period of 1895–96, when 2,284 plants were reported. The other information furnished with the names in this table gives an insight into the variety and extent of the industrial establishments in the state.

MILWAUKEE.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1	Abel & Bach Trunk Factory	Cor. 10th St. and St. P. Ave	Trunks and Traveling Bags	1881
2	Abeler & Mahler	Cor. Oneida and River Sts	Pants, Shirts, Overalls	1885
3	Abend Post	84 Mason St	Publishers and Printers	1875
4	Charles Abresch Co	415 Poplar St	Wagons and Carriages	1874
5	Ackermann, Robt	816 11th St	Shoes and Slippers	1888
6	Acme Laundry Co	964 Winnebago St	Laundry	1895
7	Adamant Mfg. Co	Virginia foot of 3d Ave	Adamant Wall Plaster	1890
8	Adams Stamp & Stencil Co	428 East Water St	Rubber Stamps and Metal Engraving	1882
9	Adams F. F., Tobacco Co	W. Water and Clybourn	Smoking and Chewing Tobacco	1846
10	Adler D. & Son, Clothing Co	325 East Water St	Clothing	1848
11	Allis E. P. Co., Reliance Works	Clinton St. and National Ave	Engines and Mill Machinery	1859
12	Allis E. P., S. Bay Foundry	Stewart Ave	Boilers and Heaters	1888
13	Amazeen Co.	Rear 318 Wells St	Boots and Shoes	1883
14	American Box Toe Co	Mich. and Milwaukee	Metal Box Toe	1896
15	Ambrosia Chocolate Co	331 Fifth St	Chocolate and Cocoa	1894
16	American Candy Factory	85 Huron St	Candy	1889
17	American Fine Art Co	256 S. Water St	Lithographing	1893
18	American Steam Laundry	173 2d St	Laundry	1885
19	American Rheostat Co	Mich. and Milwaukee	Automatic Motor Starter	1897
20	Andrae T. & Son	Clinton and Florida Sts	Bicycles	1896
21	Andrews, C. E. Co	300 and 302 Broadway	Baking Powder	1867
22	Andrews, Fred. & Co	Canal St.	Cut and Sawed Stone	1880
23	Anstedt, C. & Son, Leather Co	550 Commerce	Leather	1886
24	Atlantic Steam Laundry	483 Third St	Laundry	1886
25	Atlas Mills	Commerce St	Milling	1883
26	Anslinger, Charles	Scott St	Furniture	1892
27	Badger Dye Works	115 North Ave	Dyeing and Cleaning	1890
28	Badger Engraving Co	E. Water and Mich. St	Wood and Plate Engraving	1897
29	Badger Illuminating Co	Third and Poplar St	Electric Arc Light	1886
30	Badger Laundry	526 Twelfth St	Laundry	1880
31	Badger Nail Co., The	Muskego Ave	Wire Nails	1897
32	Badger State Shoe Co	55 and 59 Fourth St	Boots and Shoes	1875

33	Bailey Heating Co.	225 Cedar St.	Steam and Hot Water Heaters	1880
34	Baird Press, The	Mich. and Milwaukee Sts.	Job Printing	1885
35	Bamboo Cycle Co.	249 and 251 Lake St.	Bicycles	1897
36	Bastom, Alexander	423 Fourth St.	Machinist and Repair Shop	1873
37	Baumbach, Charles, Co.	Market and Oneida	Oils and Paints	1850
38	Bayley, Wm. & Sons, Co.	732 and 766 Greenbush	Foundries and Machinists	1856
39	Bay View Steam Laundry	1053 Kinnikinnic Ave.	Laundry	1893
40	Beals, Torrey & Co.	62 Third St.	Boots and Shoes	1883
41	Bechtner, Paul Co., The	Foot of Third Ave.	Yeast, Vinegar and Pickles	1893
42	Beck, C. A.	Canal St.	Planing Mill	1870
43	Becker, Wm., Leather Co.	Commerce St.	Leather	1868
44	Benedict & Co.	402 Grand Ave.	Clothing	1878
45	Benjamin, H. M., Coal Co.	River St. and Juneau Ave.	Coal and Wood	1873
46	Benning, Joseph	814 Winnebago St.	Granite and Marble Cutter	1885
47	Berger Bedding Co.	529 Market St.	Spring Beds, Mattresses	1888
48	Berghoefer, Lupinski Mfg. Co.	967 N. Water St.	Millwright and Machinist	1889
49	Beyer, J. V.	433 Commerce St.	Upholstering	1875
50	Biddel Chemical Works	787 Thirtieth St.	Chemicals	1893
51	Biersach & Niedermeyer	216 Fifth St.	Ornamental Iron and Copper	1873
52	Birkenwold, S., Co.	122 Rear of Fowler	Packing House Fixtures	1857
53	Blatz, Val., Brewery Co.	651-657 Broadway	Bottling Beer	1877
54	Blatz, Val., Brewery Co.	Broadway	Brewers and Malsters	1851
55	Boden Packing Co.	Muskego Ave.	Beef and Pork Packers	1894
56	Bogenberger Bros.	290 Fifth St.	Galvanized Iron Works	1891
57	Bradley & Metcalf Co.	Chicago and E. Water	Boots and Shoes	1843
58	Brand Stove Co.	295 Sixth St.	Stoves and Ranges	1868
59	Bremer, Wm.	285 Oregon St.	Iron and Wire Goods	1873
60	Brillmeyer & Son	317 Sherman St.	Church Furniture	1895
61	Brodesser Elevator Co., The	512 Commerce St.	Freight and Pass. Elevators	1884
62	Brown, Thomas H.	133 Michigan	Carriages	1860
63	Brown's Laundry	470 Farwell	Laundry	1894
64	Bruess & Martin	880 Seventeenth St.	Interior Woodwork	1893
65	Bruess Ritter Co., The	418 Ninth St.	Bar-room Fixtures	1898
66	Bub, Joseph, Co.	317 Michigan St.	Upholstering	1893
67	Bucyrus Steam Shovel and Dredge Co.	South Milwaukee	Mining Machinery	1892
68	Burdick, Armitage & Allen	Cor. Milwaukee and Mich.	Job Printing	1887
69	Burnham Bros.	525 Howell Ave.	Brick	1856
70	Burnham Bros.	Wauwatosa	Brick	1893
71	Burnham, John L.	Foot of Park St.	Brick	1860
72	Burroughs, Geo.	424 E. Water St.	Mfg. Trunks	1867

MILWAUKEE—Continued.

	Location.	Name of Firm.	Kind of Goods Made or Work Done.	Established.
73	Buxbaum Boiler Works	Virginia St	Boilers	1893
74	Campbell, H. M	514 Grand Ave	Laundry	1880
75	Connor Bros	522 State	Laundry	1878
76	Carnillie Bros	Washington & Barclay	Office Fixtures	1868
77	Carpenter, Underwood F'cty Co	518 Grand Ave	Bakery and Confectionery	1874
78	Castalia Bottling Works	Wauwatosa	Weis Beer and Mineral Water	1893
79	Centennial Bell & Iron Foundry	238 Oregon St	Brass and Iron Castings	1876
80	Chase Brick Co	Lincoln Ave	Brick	1876
81	Chi., M., St. P. R'y Repair Shops	Garfield Ave	Rep. Locomotives and Cars	1858
82	Chi., M., St. P. R'y Car Shops	Merrill Station	Rep. Locomotives and Cars	1888
83	Chi. & N. W. Repair Shop	Lake Shore	Rep. Locomotives and Cars	1855
84	Cheif Cycle Mfg. Co	West Water St	Bicycles	1896
85	Citizen's, The	Milwaukee and Mich	Publishing	1896
86	Clement Williams & Co	424 Broadway	Furniture	1882
87	Coldewe, G., & Co	827 Sixth St	Brick Moulds	1882
88	Columbia Publishing Co	415 East Water	Publishing and Printing	1871
89	Colnic, C	219 Eighth St	Art Metal Works	1893
90	Conrad Bros	Commerce St	Leather	1869
91	Consolidated Vinegar Works, The	298 Milwaukee St	Vinegar	1886
92	Conway Cabinet Co., The	20th St. and St. Paul Ave	Mantels and Cabinet Work	1855
93	Cook & Hyde Stone Co	31st and Galena	Cut Stone	1853
94	Cox, Joseph L	87 Sixth St	Metal Skylights	1884
95	Cream City Brewery	499 Thirteenth St	Beer	1879
96	Cream City Brewing Co	510 Thirteenth St	Bottling Beer	1886
97	Cream City Brick Co	St. P. Ave. between 13th and 14th	Brick	1890
98	Cream City Broom Factory	516 Lee	Brooms	1876
99	Cream City Brush Works	611 Chestnut	Brushes	1892
100	Cream City Can Works	263 Reed St	Tin Cans	1893
101	Cream City Hat Co	255 East Water St	Gloves	1890
102	Cream City Laundry	489 Broadway	Laundry	1886
103	Cream City Sash and Door Co	7th Ave. and Park St	Sash, Doors and Blinds	1890
104	Cream City Woven Wire Works	724 Canal St	Wire Mattresses	1886

105	Crow Stove Polish Co	26th St. and Galena	Stove Polish	1883
106	Chrystal Soap Co	56 Fifth St	Toilet Soap	1890
107	Cudahy Bros. Co	Cudahy	Beef and Pork Packers	1856
108	Cohn Bros.	340 Broadway	Shirts, Pants and Overalls	1870
109	Carpeles Co	13th and St. Paul Ave	Trunks	1874
110	Daisy Roller Mills	Foot Wash. Ave	Flour	1886
111	Chain Belt Co	Park bet. 13th and 14th Ave.	Belts and Sprocket Wheels	1870
112	Damonast, The	Montgomery Block	Publishing and Printing	1890
113	Danialson, B. J	875 Clinton St	Interior Woodwork	1893
114	Darsch, J., & Son	205 Wells St	Carriages and Wagons	1870
115	Davelaar, Martin	South City Limits	Brick	1876
116	Davis, J. U	Mich and Milwaukee	Gold and Silver Plating	1893
117	Davis Bros. Mfg. Co	576 Clinton St	Boilers and Smoke Stacks	1890
118	De Guenther Steam Laundry	133 Mason St	Laundry	1880
119	De Long, H	636 Park St	Pictures, Frames	1893
120	Diamond Ink Co	Cambridge Ave	Inks, Mucilage	1875
121	Doelger & Kirsten	507 Cedar St	Machinist	1892
122	Drake Mfg. Co	15th St. and St. Paul Ave	Bicycle Wood Rims	1896
123	Dunke, John	1016 Sherman Ave	Tanks and Casks	1888
124	Dutcher Co., T. A. & P. E	Rear 607 Kinnikinnic Ave	Wrought Iron and Steel Castings	1888
125	Eagle Coffee and Spice Mill	336 Fourth St	Coffee and Spices	1878
126	Eagle Flouring Mill	Commerce St	Flour	1846
127	Eagle Horse Shoe Co	South Milwaukee	Horseshoes	1892
128	Eagle Laundry	683 Kinnikinnic Ave	Laundry	1895
129	Eagle Lye Works	28 Erie St	Lye and Potash	1870
130	Eagle Mfg. Co	622 Poplar St	Furniture	1887
131	Eagle Mirror and Art Glass Works	Cor. Park and Hanover	French Plate Mirrors	1893
132	Elfinger, Lucas	1501 Cherry St	Brushes	1895
133	Elkert Bros	1124 Eighth St	Leather	1866
134	Elmore, R. P. Co., The	Germania Bldg	Coal and Wood	1886
135	Elmwood Cycle Co., The	Pierce and 3d Ave	Bicycles	1887
136	Elwood Cycle Co., The	5th Ave. and Pierce St	Bicycles	1897
137	Empire Laundry	502 Twenty-fifth St	Laundry	1888
138	Engel, Frank	626 Hubbard St	Tanner	1893
139	Enterprise Box and Lumber Co	Muskego Ave. and Canal St	Packing Boxes	1865
140	Esch & Son	58 Clybourn	Trucks and Transfer Wagons	1846
141	Eureka Steam Laundry	11 Erie St	Laundry	1894
142	Evening Wisconsin, The	Mich. and Milwaukee	Publishers	1847
143	Everly, J. M	298 Broadway	Job Printing	1884
144	Excelsior Pub. Co	86 Mason St	Publishing and Printing	1883

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
145	Faust Kraus Co., The	90 S. Water St.	Millers	1876
146	Falk Mfg. Co.	Wauwatosa	Street R'y Work	1894
147	Ferneke & Co., J	348 East Water	Candy	1867
148	Ferge & Klepper	527 Park St.	Ex. and In. Woodwork	1888
149	Fette & Meyer Coal Co	513 River St.	Coal and Wood	1886
150	Filer & Stowell	Beecher St.	Mill Machinery	1867
151	Finkner, H	Fowler St.	Wagons	1883
152	Fischer, Joseph	2526 Lisbon Ave.	Cooperage	1833
153	Fischer Cleaning Works	547 East Water St.	Dyeing	1873
154	Fixter, Joseph	Cor. 2nd and Cherry St.	Cooperage	1857
155	Flint, J. G	110 E. Water St.	Coffee and Spice Mill	1858
156	Flint, J. G., Jr	114 W. Water St.	Cut Tobacco	1870
157	Foersch, Willam	Lisbon Ave. bet. 23d and 24th St.	Wagons	1885
158	Frank & Son Packing Co.	644 Market St.	Sausage	1861
159	Franzen, William	Lincoln Ave.	Bottles and Fruit Jars	1894
160	Friedenker Publishing Co.	470 E. Water St.	Publishing	1891
161	Friedlaender, M	State bet. 5th and 6th St.	Mittens	1888
162	Frienu Bros. Clothing Co.	358 Broadway	Clothing	1847
163	Froedtert Bros. Grain and Malt Co.	Cor. 7th and Cherry	Maltsters	1885
164	Froedtert Bros. Grain and Malt Co.	189 Sherman	Maltsters	1877
165	Froedtert Bros. Grain and Malt Co.	518 Chestnut	Elevator and Milling	1872
166	Fuldner, L., & Co.	186 and 188 Reed St.	Rectifiers of Spirits, etc.	1858
167	Fuller Warren Co., The	Wright and 32d St.	Stoves and Furnaces	1890
168	Galland-Henning Pneu. Malt. Drum. Mfg. Co.	South Water and Virginia	Pneumatic Malting Drums	1890
169	Gallum, A. P. & Son, "Empire Tannery"	975 N. Water St.	Leather	1876
170	Gemeinhardt, John	936 Fourth St.	Cooperage	1888
171	Gem Hammock and Fly Net Co.	184 Hanover St.	Hammocks and Fly Nets	1883
172	Gem Laundry	348 Milwaukee	Laundry	1891
173	Gem Milling Co.	Knapp and North Ave.	Milling	1881
174	Gender & Paeschke	15th St. and St. Paul Ave.	Tinware Goods	1882
175	Generich, F. W. F	527 Nineteenth St.	Marble Works	1891

176	Gerlach & Co., Wm.	Cor. 8th and Prairie	Maltsters	1848
177	Germania Publishing Co.	Cor. Wells and 3d St.	Publishing and Printing	1864
178	Gettelmann Brewing Co. A	Wauwatosa	Bottlers of Beer	1891
179	Gettelmann Brewing Co. B	Wauwatosa	Brewers and Maltsters	1854
180	Gibbs Electric Co.	Cor. Clinton and Oregon St.	Dynamos, Motors, etc.	1893
181	Gillett & Co.	Mich. and Milwaukee	Printing	1891
182	Globe Iron & Wire Works	292 S. Water St.	Iron Fences and Wire Goods	1895
183	Gollasch Co., The	116 Ogden Ave.	Mfg. Mustard	1895
184	Goll & Frank	598 Thirteenth St.	Overalls, Shirts and Pants	1892
185	Goures, Phillip	1819 Vliet St.	Cooperage	1888
186	Graf & Co., William	417 Seventh St.	Cigars	1859
187	Grant Marble Co.	57 Fourth St.	Marble and Granite	1871
188	Gross Bros. Soap Co., The	958 N. Water St.	Soap	1887
189	Gross & Sons, J.	1st Ave. and Sixth St. Bridge	Coal and Wood	1886
190	Great Western Knitting Works	310 Broadway	Worsted Hoods, Mittens, etc.	1881
191	Grede & Bro., George	248 Reed St.	Carriages and Wagons	1884
192	Grunslade Foundry Co.	Jackson St.	Architectural Iron	1880
193	Greve Lithographing Co.	Cor. Mich. and Milwaukee	Lithographing	1892
194	Graf, John	Greenfield and 17th Ave.	Soda Water and White Beer	1885
195	Gross Bros., The Fred C.	Muskego Ave.	Meat Dealers	1882
196	Gruhl Sash & Door Co.	142 Steward Ave.	Sash and Doors	1885
197	Gugler Lithographing Co.	Broadway and Ogden Ave.	Lithographing	....
198	Gugler, Henry, Co.	218 Third St.	Publishers and Engravers	1892
199	Gunz & Co., R.	Muskego Ave.	Meat Dealers	1870
200	Haase Coal Co., Chas. J.	587 N. Water St.	Coal and Wood Yard	1877
201	Habheger, Theo.	568 Market St.	Wagons and Buggies	1876
202	Hack & Alten	534 Clinton	Steam Dyeing	1882
203	Hagemann's Laundry	306 Grove St.	Laundry	1892
204	Hannan, Wm.	752 Fourth St.	Iron Works	1890
205	Hannan & Son, A.	96 Sixth St.	Wagons	1887
206	Hanser, Johann, & Sons	1102 Twenty-fourth St.	Soap	1892
207	Hansen's Empire Fur Factory	373 East Water St.	Fur Clothing	1862
208	Hansen Hop & Malt Co., The	S. Bay St.	Maltsters	1881
209	Hant, Kamp & Connan	Cor. Mich. & Milwaukee	Printing	1887
210	Harlass, Henry	413 Fourth St.	Brooms	1890
211	Hatch, J. B.	Near 6th St. Bridge and Canal	Shoddy from Woolen Rags	1883
212	Hays, George	228 Fourth St.	Extension Ladders, Butcher' Fix	1877
213	Hebenstret & Bartelt	1328 Vliet St.	Upholsterers	1894
214	Hecht & Zumach	283 W. Water St.	Putty, Mixed Paint	1875
215	Heidelberg Bros., H.	S. Milwaukee	Baskets	1888

MILWAUKEE—Continued.

	Location.	Name of Firm.	Kind of Goods Made or Work Done.	Established.
216	Heinel & Son, Joseph	417 N. Water St	Carriages and Wagons	1867
217	Heinemann	Huron and Broadway	Fur Overcoats	1858
218	Heinemann & Co., M	427 Broadway	Artificial Flowers	1857
219	Heller & Mueller	475 Third St	Elevators	1895
220	Hendricks, H	North Ave. and 30th St	Cooperage	1890
221	Henes, Jr., & Co., L	Canal and Dock St	Coal and wood	1876
222	Hennicke Co., C	162 W. Water St	Wire goods, Vases, etc	1865
223	Heuschel, C. B	321 Mineral St	Cigar boxes	1882
224	Hensel, Julius	729 Eleventh Ave	Cooperage	1893
225	Hermann, Albert	1707 Brown St	Pottery	1887
226	Herold, Der	431 Broadway	Printing and Publishing	1861
227	Heyer, George	397 Reed St	Upholstering	1889
228	Hilbert & Co., A. J	335 E. Water St	Chemicals and Perfumes	1887
229	Hilty Lumber Co., M	St. P. Ave. and Clermont St	Boxes and Planing	1886
230	Hirsch Bros	267 Reed St	Iron Foundry and Casting	1880
231	Hoffmann Co., John	501 River St	Sausage	1876
232	Hoffmann Mfg. Co., B	606 Cedar St	Iron Founders	1893
233	Hoffmann & Bauer	279 Lake St	Tin and Sheet Iron Works	1878
234	Hoffmann Billings Mfg. Co	96 Second St	Iron Work	1855
235	Hoffmann Billings Mfg. Co	178 Beecher St	Steam and Gas Engines, etc	1885
236	Hoffemann, Chas. H	719 Locust St	Brooms	1888
237	Holbrook, B. H	197 E. Water St	Tanners Supplies	1891
238	Hosch Bros., J	401 E. Water St	Furs	1880
239	Holtz, Bernhardt	1174 Eighth St	Brooms	1887
240	Hustig, E. L	Corner Fifth St. and Vliet	Soda Water and Weiss Beer	1877
241	Illinois Leather Co	Canal St	Plastering Hair	1886
242	Illinois Steel Co	Bay View, Seventeenth Ward	Steel and Iron Rails	1868
243	Instructive Toy Co	Thirty-ninth and Cherry St	Toys	1886
244	Iverson Co., J. C	425 E. Water St	Picture and Mirror Frames	1867
245	Jackoboson & Son, C. L	Layton Park	Hardware Specialties	1896
246	Jacobs & Son, B. H	Nineteenth St. and St. Paul Ave	Cooperage	1883
247	Jacobi, Fred	442 Pierce St	Refrigerators	1893
248	Jalass, Henry V	1018 St. Paul Ave	Packing boxes	1866

249	Jenkins, W. T.	Mich. and Milwaukee	Bookbinders and Mfg. Blk. Books	1893
250	Jewett & Sherman Co.	287 Broadway	Mfg. Baking Powder	1868
251	Jahnke, August	1174 Seventh St	Scroll Sawing and Wood Turning	1894
252	Johnson Bros. Factory	12 Erie St	Confectionery and Crackers	1847
253	Johnson Electric Service Co.	120 Sycamore St	Heat Regulator	1884
254	Johnson Soap Co., B. J.	Fourth and Fowler	Soap	1864
255	Jones Bros., A. P.	618 Poplar St	Corks and Bungs	1885
256	Journal Co., The Daily	Corner Michigan and Milwaukee	Printing and Publishing	1883
257	Joys Bros. Co.	205 E. Water St	Sail Makers	1843
258	Juneau Cycle Mfg. Co., The	Oregon St	Bicycles	1897
259	Kalamazoo Knitting Co.	Fourth and Fowler St	Hosiery, Gloves, etc.	1882
260	Kalt, Zimmer Mfg. Co.	419 E. Water St	Overgaiters and Leggings	1890
261	Katzenstein Co., E.	338 East Water St	Clothing	1897
262	Keller & Son, F. W.	328 Oregon	Parlor Frames	1892
263	Kempsmith Mach. Tool Co.	Loomis and Woodward Ave	Machine Tools	1888
264	Keogh, Ed.	386 Broadway	Job Printing	1867
265	Ketter, Fred	535 30th St	Cooperage	1894
266	Kieckhaefer Bros. Co.	St. P. Ave bet. 9th and 10th	Tin Ware	1880
267	Kieckhaefer Elevator Co., A.	Cor. 12th and St. Paul Ave	Passenger and Freight Elevators	1874
268	Kindling, Lewis	297 W. Water St	Cigars	1872
269	King, Fowle & McGee Co.	242 Broadway	Printing and Engraving	1837
270	Kipp Bros.	216 S. Water St	Mattresses and Spring Bed	1883
271	Kipp Co., B. A.	North Milwaukee	Upholstered Furniture	1892
272	Klabinski Mineral Wool Co.	Foot of Reed St	Mineral Wool	1896
273	Knauber Litho. Co., J.	318 Cedar St	Lithographing	1867
274	Knibel, H. P.	Reed and Park	Upholstering	1890
275	Kuehn Boot & Shoe Co.	446 Clinton	Shoes	1892
276	Kopperud & Co., Andrew	231 Clinton St	Blacksmithing, Machinist	1894
277	Kraatz Estate, Chas	Wauwatosa	Brick	1881
278	Kraatz & Hograve	782 3rd St	Wood Carving	1886
279	Kranenberger, Ben	2130 Galena	Soda and Mineral Water	1895
280	Kraus, Merkel, Malting Co.	So. Water St	Malsters	1881
281	Kraus Shoe Co.	623 Cedar St	Shoes	1896
282	Krause Elevator "B"	Foot 7th street	Grain Elevator	1861
283	Krause, F. & Co.	Near St. Paul depot	Grain Elevator	1891
284	Krueger & Schoen	720 Vliet	Trunks	1894
285	Kump, Mrs.	1324 Vliet	Bedding	1874
286	Kunth, Otto C.	Lee and 3rd	Wagons	1877
287	Ladwig & Schrank Co.	49 Biddle St	Flavoring Extracts	1876
288	Lake Cycle Mfg. Co.	Cor. Erie and E. Water	Bicycles	1897

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
289	Lakeside Distilling Co.	Carrolltown	Distilling Spirits	1893
290	Lamp & Miller Mfg. Co.	511 Cedar St.	Brass Goods	1869
291	Lange & Leihammer	Cor. 4th and Park	Office and Store Fixtures	1893
292	Langenberger, John	319 Wells St.	Contractor	1864
293	Lange Mfg. Co., A.	Vliet St.	Bar and Store Fixtures	1897
294	Larson, Mons	603 Clinton St.	Clothing	1885
295	Layton & Co.	Muskego Ave.	Meat packers	1842
296	League Cycle Co.	15th St. & St. Paul Ave.	Bicycles	1896
297	Leidersdorf, B.	So. Water and Reed	Tobacco	1858
298	Lemke, August	419 State St.	Brooms	1860
299	Lindemann, A. J. & Hoverson Co.	195 Hanover St.	Stoves	1892
300	Lindemann & Sons, J. P.	827 St. Paul Ave.	Tinware	1878
301	Lintrick Mfg. Co.	677 E. Water St.	Sliding Door Hangers	1888
302	Liquid Car. Acid Mfg. Co.	327 9th St.	Liquid Car. Acid	1896
303	Loeffelholz, A. & Co.	171 Clinton St.	Brass Goods	1867
304	Loewenbach, A.	215 2nd St.	Job Printing	1880
305	Loewenbach & Son	314 E. Water St.	Book Binders	1874
306	Logemann Bros.	288 Oregon St.	Machinists	1885
307	Lohr & Weifenbach	Cor. 18th and Forest Home	Marble and Granite	1890
308	Lorenz Bros. Maccaroni Co.	890 12th St.	Maccaroni	1883
309	Luther & Giese	258 Lake	Tools and Machinery	1888
310	Mahler Albenberg Co.	353 E. Water St.	Pants, Overalls, Shirts	1888
311	Manville Covering Co.	Cor. 3rd and Clybourn	Steam Pipe and Boiler Covering	1884
312	Marshall, Fred	1021 4th St.	Brushes	1896
313	Martin, Geo., Leather Co.	538 Commerce St.	Leather	1865
314	Matthews Bros. Mfg. Co.	61 4th St.	Furniture and Int. Wood Work	1857
315	Mayer, F., Boot & Shoe Co.	166 Walnut St.	Boots and Shoes	1880
316	Mayer, F., Boot & Shoe Co., Factory 2	3rd St.	Boots and Shoes	1897
317	Mayhew Mfg. Co.	862 31st St.	Chairs	1886
318	Mecklenburg, A. F., Lumber Co.	30th St.	Planing Mill	1897
319	Meinicke, A. & Sons	Mason and Front St.	Bamboo Furniture and Willows	1858
320	Meisselbach, A. D., Co.	North Milwaukee	Bicycles	1896

321	Meissenheimer Printing Co.	National Ave. and Clinton	Job Printing	1887
322	Mellen, Wm. & Son	340 Barclay	Brass Founders	1870
323	Mercury Laundry	595 12th St.	Laundry	1893
324	Mertes & Miller Co.	Cor. Barclay and Lake Sts.	Boilers, Smoke Stacks, Tanks	1892
325	Meyer, Rotin, Printing Co.	Mich. and Milwaukee	Job Printing	1891
326	Milbrath, D. A.	313 Prairie St.	Carriages, Buggies, Wagons	1885
327	Miller Co., H. C.	342 Broadway	Blank Books	1889
328	Miller, Fred., Brewing Co.	Wauwatosa	Brewer and Malster	1858
329	Miller, Fred., Brewing Co.	Wauwatosa	Beer Bottling	1886
330	Milwaukee Bag Co.	Erie near Broadway	Paper and Cotton Jute Sacks	1868
331	Milwaukee Bedding Co.	West Water St.	Bedding, Mattresses	1892
332	Milwaukee Blk. Book Mfg. Co.	218 3d St.	Blank Books, Book Binding	1891
333	Milwaukee Brick Co.	Wright and 33d St.	Brick	1895
334	Milwaukee Bridge & Iron Works	Cor. 17th and St. Paul Ave.	Arch. Iron Wks. and Bridge Contracts	1887
335	Milwaukee Brass & Copper Works	241 Greenfield Ave.	Brass and Copper Works	1887
336	Milwaukee Boiler Works	Oregon and Barclay Sts.	Boilers, Smoke Stacks, etc.	1862
337	Milwaukee Brass Mfg. Co.	190 East Water St.	Brass Castings, Brass Goods	1892
238	Milwaukee Brewing Co.	Clarence and 8th Ave.	Brewers and Bottling Beer	1894
339	Milwaukee Casket Co.	Cor. 15th and St. Paul Ave.	Coffins and Cloth Caskets	1875
340	Milwaukee Cement Co., Plant No. 1	Town of Milwaukee	Cement	1875
341	Milwaukee Cement Co., Plant No. 2	Town of Milwaukee	Cement	1887
342	Milwaukee Chair Works	30th and Center St.	Office Chairs	1877
343	Milwaukee Coffee Roasting Co.	Clinton St.	Roasting Coffee	1895
344	Milwaukee Dry Dock Co.	Foot of Washington St.	Ship Builders and Repairers	1866
345	Milwaukee Dry Dock Co.	Canal St.	Ship Builders and Repairers	1874
346	Milwaukee Electric Ry. & Light Co.	River St.	Electric Power for St. Ry.	1891
347	Milwaukee Electric Ry. & Light Co.	Broadway	Electric Power, Light and Heating	1891
348	Milwaukee Engineering Co.	19th St. and St. Paul Ave.	Bicycles	1896
349	Milwaukee File Works	31st and Cherry St.	Files and Rasps	1890
350	Milwaukee Foundry & Supply Co.	Cor. Ferry and Lake	Patterns and Foundry Supplies	1894
351	Milwaukee Gas Light Co.	Jefferson and Menomonie	Mfg. Coal and Water Gas	1852
352	Milwaukee Gas Stove Co.	15 Erie St.	Gas Stoves	1890
353	Milwaukee Harvester Co.	Park St. bet. 12th and 15th Aves.	Farm Mach. and Farm Impl.	1881
354	Milwaukee Hay Tool Co.	Layton Park	Hay Tools and Corn Huskers	1888
355	Milwaukee Linseed Oil Co.	Barclay and Florida St.	Linseed Oil and Oil Cakes	1875
356	Milwaukee Lith. & Eng. Co., The	217 3d St.	Lithographing	1852
357	Milwaukee Malt and Grain Co.	Florida St.	Malsters	1892
358	Milwaukee Mfg. Co.	North Milwaukee	Bicycles and Bicycle Specialties	1896
359	Milwaukee Monument Co.	Cor. 8th Ave. and Mitchell	Monuments	1876
360	Milwaukee Mirror & Art Glass Works	205 Broadway	Mirror Plates, etc.	1887

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of ods Made or Work Done.	Estab-lished.
361	Milwaukee Net Co.	324 Broadway	Fly Nets	1895
362	Milwaukee Novelty Dye Works	Cor. Mich. and Jefferson	Chemical Fur Cleaning and Dyeing	1896
363	Milwaukee Ornamental Carving Co.	416 Fowler St.	Stucco and Wood Carving	1887
364	Milwaukee Palming Co.	425 Clybourn St.	Leather Mittens	1888
365	Milwaukee Sleigh Co.	1031 St. Paul Ave.	Sleighs	1895
366	Milwaukee Steam Boiler Works	233 Oregon St.	Steam Boilers and Smoke Stacks	1866
367	Milwaukee St. Ry. Co.	Mitchell and Kinnikinnic Ave.	Car Repair Shop	1895
368	Milwaukee St. Car. Repair Shops	Kinnikinnic Ave.	Machine Shop and Car Repairs	1893
369	Milwaukee Suspender Co.	327 Chestnut St.	Suspenders	1891
370	Milwaukee Tack Co.	Layton Park	Tacks, Shoe and Small Nails	1885
371	Milwaukee Telegraph, The	Cor. Mich. and Milwaukee	Publishing	1878
372	Milwaukee Wire & Iron Works	122 Sycamore St.	Wire Goods	1890
373	Milwaukee Wood Mfg. Co.	1513 St Paul Ave.	Wagon and Sleigh Wood Material	1891
374	Milwaukee Worsted Cloth Co.	32nd and Galena	Worsted Cloth	1891
375	Milwaukee Worsted Mills	Oakland Ave.	Worsted and Woolen Goods	1888
376	Molitar, M.	314 East Water St.	Paper Boxes	1876
377	Moore Mfg Co.	St. P. Ave. bet. 19th and 20th	Chain Hoists and General Machinery	1896
378	Moore & Whitmore Co.	S. Milwaukee	Shipping Hampers, Baskets	1870
379	Mueller, E. P.	Commerce St.	Drying Grains	1895
380	Mueller, John	13th and Fond du Lac Ave.	Wagons	1877
381	Mueller, John L.	414 4th St.	Wagons	1862
382	Mueller & Sons Co., The	Canal St.	Cigar and Packing Boxes	1872
383	Munkwitz, Edward H.	197 East Water St.	Tool and Pattern Maker	1890
384	My Laundry	2446 Vleit St.	Laundry	1885
385	National Blower Works	Cor. 17th and St. Paul Ave.	Heating, Ventilating and Dyeing Appar.	1892
386	National Distilling Co.	79 Buffalo	Rectifiers of Spirits and Yeast	1890
387	National Distilling Co.	Menomonie Valley	Yeast and Distiller of Spirits	1883
388	National Elastic Nut & Bolt Works	Bay View S. of Rolling Mill	Nuts and Bolts	1894
389	National Envelope Co.	South Water St.	Envelopes	1893
390	National Knitting Co.	889 Clinton St.	Knit Goods	1885
391	National Sash & Door Co.	7th and National Ave.	Sash, Doors, Blinds and Mouldings	1885
392	National Straw Works	18th Ave. and Scott St.	Ladies' Hats	1894

393	New Method Laundry	617 State St.	Laundry	1893
394	News Publishing Co.	199 West Water St.	Publishing	1880
395	Niedecken & Co.	334 East Water St.	Blank Books	1847
396	Nordberg Mfg. Co.	480 Virginia	Engines and Pumping Machinery	1884
397	North Side Brush Works	938 3d St.	Brushes	1885
398	North Side Carriage Works	Cor. 4th and Sherman St.	Wagons, Carriages and Repairing	1894
399	Northwestern Furniture Co.	747 N. Water St.	Office and Saloon Furniture	1881
400	Northwestern Laundry	1098 Richards St.	Laundry	1892
401	Northwestern Malleable Iron Co.	Park bet. 13th and 14th Aves.	Malleable Iron Castings	1882
402	Northwestern Marine Elevator Co.	S. Water and Florida St.	Grain Storage	1868
403	Northwestern Steam Boiler Works	1028 St. Paul Ave.	Boilers	1872
404	Northwestern Straw Works	Reed St.	Ladies' and Children's Hats	1875
405	Nut & Washer Mfg. Co.	Reynolds and Wilcox Sts.	Nuts, Washers and Fellow Plates	1886
406	Obermann Brewing & Bottling Co.	787 24½ St.	White Beer and Soda Water	1896
407	Ogden, G. W., Co.	172 3d St.	Carriages and Buggies	1848
408	Ostuns Laundry	1840 Fond du Lac Ave.	Laundry	1893
409	Obenberger, Joseph	125 Barclay St.	Ship Smithing	1854
410	Pabst Brewing Co. (Bottling Dept.)	9 Chestnut St.	Bottling Beer	1881
411	Pabst Brewing Co.	9 Chestnut St.	Brewers and Malsters	1842
412	Pahl, E. R., & Co.	Huron St.	Bak. Powder and Malt Coffee	1894
413	Paine Bros. Co.	Canal St.	Drying Grain and Gen. Comm.	1897
414	Paine Bros. Co. Elevator C., St. P. Ry.	Foot of 6th St. and Menomonie River	Grain Elevator	1853
415	Palace Steam Laundry	Reed St.	Laundry	1896
416	Pantke, E. R., Co.	394 East Water St.	Ladies' Fur Goods and Hats	1857
417	Patten, James E., Co.	Cor. Lake and Barclay	White Lead, Colors and Putty	1855
418	Pawling & Harnischfeger	156 Clinton St.	Machine, Tool and Pattern Ship	1884
419	Pederson, Chas.	National Ave.	Clothing	1895
420	Peerless Laundry	517 Grand Ave.	Laundry	1893
421	Perfection Laundry	207 Broadway	Laundry	1896
422	Permakasse, L	Reed St.	Shirts	1896
423	Petermann, H.	524 Chestnut	Brooms	1863
424	Pfannerstill & Hubauck	1606 St. Paul Ave.	Machinist	1895
425	Pfeiffer, Chas.	131 Ferry St.	Machine Shop	1894
426	Pfengradt, Co., The	277 East Water St.	Candy	1887
427	Pfister & Vogel Leather Co.	Foot of 1st Ave.	Leather	1848
428	Pfister & Vogel Leather Co.	Vogels Island	Leather	1878
429	Pfister & Vogel Tanning Co., No. 1	Bay View	Leather	1889
430	Pfister & Vogel Tanning Co., No. 2	Bay View	Leather	1896
431	Phila. Reading, Coal & Iron Co., The	150 2d St.	Miners and Shippers of Coal and Iron	1891
432	Phillips Furniture Co.	Wauwatosa	Furniture and Office Fixtures	1890

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established
433	Phoenix Knitting Co	Broadway	Knit Goods	1885
434	Pietsch, Ferdinand	619 Cedar St	Brass Founders and Coppersmiths	1883
435	Pietsch, Otto	246 W. Water St	Chemical Dyeing Works	1855
436	Plankinton Packing Co	Muskego Ave	Pork and Beef Packers	1864
437	Pollitt Cycle Works	703 Winnebago	Bicycles	1896
438	Pollsworth Steam Laundry	1064 Teutonia St	Laundry	1897
439	Poppert, Geo., Mfg Co	North Milwaukee	Sash, Doors, Blinds, etc	1866
440	Prescott, Fred. M., Steam Pump Co	237 Oregon	Steam and Air Pumps	1895
441	Preuss, R. J., Co	670 Kinnickinnick Ave	Mattresses and Spring Beds	1896
442	Prinz & Rau Mfg. Co., The	659 East Water	Grain Cleaning Machinery	1888
443	Peetz & Hoffmann	51 3d St	Carriage and Sleigh Wood Work	1881
444	Quin Blank Book & Stationery Co	437 E. Water St	Blank Books	1875
445	Radke Bros. & Karsch	326 Broadway	Job Printing	1895
446	Raetz, Gustav	Madison St	Carriage Works and Repairing	1883
447	Rauschenberger, John	871 Teutonia	Ropes, Cordage and Hair Goods	1864
448	Razall, H. G	379 E. Water St	Blank Books	1878
449	Rediske Vinegar Co	S. of 8th Ave	Vinegar and Compressed Yeast	1892
450	Reineck, Wm	896 Holton St	Brooms	1878
451	Reinhart, F. C	Cudahy	Pork and Lard Bbls	1896
452	Reliance Laundry	213 Reed St	Laundry	1896
453	Reliance Mills	70 W. Water St	Milling	1868
454	Rice & Friedmann Co	Cor. 19th and Lloyd St	Clothing	1856
455	Rich, A. W., Shoe Co	Reed and S. Water St	Shoes	1867
456	Richter, F., & Son	882 6th St	Foundry and Iron Works	1856
457	Rickers & Co	52 3d St	Laundry and Toilet Soap	1872
458	Ricketson Mineral Paint Co	S. Milwaukee	Dry Mineral Paint	1891
459	Riemer, A. H., Co	225 Cedar St	Boots and Shoes	1891
460	Ritter, Louis	270 5th St	Saloon Furniture	....
461	Riverside Printing Co., The	218 3d St	Printing, Lithographing, etc	1868
462	Rockwell Mfg. Co	Park, bet. 5th and 6th Aves	Sash, Doors, Blinds, etc	1871
463	Rohn & Meyer	448 E. Water St	Locksmiths	1860
464	Romadka Bros	223 3d St., 222 4th St	Trunks and Traveling Bags	1848

465	Rosenthal Corn Husking Mach. Co	32d St. near Walnut St	Corn Husking Machines	1896
466	Roth Mfg. Co	701 Cedar St	Mustard, Pickles and Preserves	1884
467	Royal Steam Laundry	396 Clinton St	Laundry	1889
468	Rundle, Spence Mfg. Co	62 2d St	Brass and Iron Goods	1880
469	Rundle, Spence Mfg. Co	Virgina and S. Water Sts	Founders	1888
470	Salisbury Laundry	1606 Clybourn	Laundry	1881
471	Sallentine, Christian	285 Virginia	Rectifiers of Spirits	1879
472	Salzmann, L.	Winnebago St	Shirts, Jackets, Overalls, etc	1896
473	Sanderson, E., & Co	Commerce St	Milling	1870
474	Sanita Health Food Co	254 Reed St	Malt Coffee	1895
475	Saturday Star	138 Reed	Publishers	1889
476	Schellinger and Tank	331 Chestnut St	Cigars	1895
477	Schielke & Grohe	327 5th St	Wagon Builders and Repairers	1897
478	Schintz, Henry, Bottling Co	607 Cherry St	Mineral Water and Weiss Beer	1888
479	Schipkunski, J.	South Milwaukee	Church Furniture	1893
480	Schlitz, Jos., Brewing Co	Walnut and 3d St	Brewers and Maltsters	1846
481	Schlitz, Jos., Brewing Co	76 Barclay St	Bottling	1886
482	Schineter, A. L., & Co	110 Huron St	Flavoring Extracts	1881
483	Schmidt, Wm. E.	6th St. near Cherry	Church Furniture	1896
484	Schmidt, Peter, & Co	355 E. Water St	Cut and Sawed Stone	1889
485	Schmidt, F., & Son	301 4th St	Galvanized Iron Works	1845
486	Schuelke, Wm., Ch. Organ Fact'y	Walnut bet. 22d and 23d Sts	Church Organs	1889
487	Schnerd, A. L., Curled Hair Co	Wauwatosa	Glue and Curled Hair	1875
488	Schoenecker Boot & Shoe Co	538 7th St	Boots and Shoes	1890
489	Schomann, H. F., Mfg. Co	S. Water and Clinton St	Repairing Machinery	1893
490	Schroeder, John, Lumber Co	Foot of Walnut St	Planing Mill	1887
491	Schwab & Sercomb	278 Clinton St	Furnaces and Iron Founders	1877
492	Schwab Stamp & Seal Co	392 E. Water St	Stamped Brass and Metal Works	1881
493	Schwalbach, Math	426 9th St	Tower Clocks	1873
494	Schwartzburg, H. H.	North Ave. and 6th St	Cigar Boxes	1889
495	Schultz, Erdmann	Foot of Clinton St	Planing Mill, etc	1887
496	Schultz, A. George, & Co	4th and Clybourn St	Paper Boxes, Sample Cards	1878
497	Schuster, George J.	283 E. Water St	Tobacconists	1878
498	Seaman, W. S., & Co	216 E. Water St	Parlor Furniture Frames	1879
499	Seaman Machine Co	318 Milwaukee St	Bicycles	1896
500	Seamless Structural Co	Foot of Reed St	Seamless Range Boilers etc	1893
501	Seebote, Der	96 Mason	Publishing and Printing	1842
502	Semmann Mfg. Co	1211 Lee St	Harness, Gig and Express Saddles	1889
503	Senderhauf, B., & Co	1037 North Ave	Toilet and Laundry Soap	1881
504	Sentinel Bindery, The	Cor. Mich. and Milwaukee	Book Bindery	1837

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
505	Sentinel Co.	89 Mason St.	Publishers and Printers	1837
506	Shadbolt & Boyd Iron Co.	129 W. Water St.	Jobbers in Iron and Steel	1863
507	Shakman, L. A., Co.	349 E. Water St.	Clothing	1853
508	Shaver, Jos., Granite & Marble Co.	7th St.	Monuments and Cut Stone	1874
509	Shaws Steel Casting Works	South Bay St.	Steel Castings	1895
510	Sheriffs Mfg. Co.	124 Barclay St.	Propeller Wheels and Marine Eng.	1854
511	Sidenberg & Hays	376 Broadway	Cloaks	1881
512	Singer Mfg. Co.	236 W. Water St.	Repair Shop, Singer Sewing M.	1883
513	Skobis Bros.	508 Commerce St.	Architectural Iron Works	1886
514	Skubol & Schumer	Beecher St.	Wagon and Carriage Repair	1882
515	Smith, Angus	S. Water and Lake St.	Grain Elevator	1866
516	Smith, Wallace & Co.	82 W. Water St.	Saddlery Hd. Harness and Fly Nets	1891
517	Smith Mfg. Co.	1031 St. Paul Ave.	Bicycle Rims	1895
518	Smith & Son	Clinton and Park St.	Hardware Specialties	1878
519	South Side Printing Co.	144 Reed St.	Publishers and Job Printing	1879
520	Specialty Mfg. Co.	Cor. Sycamore and W. Water	Hardware Specialties	1897
521	Sprinkmann, F.	131 Sycamore St.	Ainsworth Boiler and Pipe Covering	1884
522	Stamm, Nortinann, Duffle Co.	Layton Park	Iron Founders	1888
523	Standard Bedding Co.	215 Reed St.	Spring Beds and Mattresses	1896
524	Standard Brick Co.	Clarmont Ave.	Brick	1882
525	Standard Chemical Works	620 Park	Chemicals and Wool Fat	1896
526	Standard Glove Works	248 W. Water St.	Gloves and Mittens	1895
527	Standard Laundry, The	Ogden Ave. and N. Water St.	Laundry	1884
528	Standard Mineral Wool Co.	South Milwaukee	Mineral Wool	1895
529	Standard Oil Co.	Walker St. and National Ave.	Dealers and Shippers of Kerosene	1880
530	Standard Printing Co.	Cor. Mich. and Milwaukee	Job Printing	1860
531	Strickel, Adrian	Vogel's Island	Harness Leather	1866
532	Steffen, August	493 Twenty-seventh St.	Cigars	1882
533	Stehling ,Chas. H.	508 Commerce	Millwrights, Carpenters	1883
534	Stehling & Bloomer	551 Tenth St.	Carriages and Wagons	1884
535	Stillman, E. R.	Foot of Washington St.	Cooperage	1884

536	Stillman, E. R.	Mineral and Barclay	Cooperage	1897
537	Stirn & Kosch Printing Co	337 E. Water St	Job Printing	1885
538	Stollenwerk & Weber Co	S. Milwaukee	Planing Mill and Mfg. Beer Boxes	1894
539	Stolper, Chas., Cooperage Co	661 Third and Fourth St	Beer Barrels	1855
540	Straw & Ellsworth Mfg. Co	354 Broadway	Fur Goods	1877
541	Struck, Fred	547 River St	Coal and Wood	1883
542	Suhm Leather Co	766 Kinnikinnic Ave	Tanners and Curriers	1883
543	Sullivan, H. J	138 Seventh St	Galvanized Iron Works	1885
544	Tainsh & Co	114 Mason St.	Job Printing	1882
545	Teweles Grundman Co	W. Water St.	Upholstering Furniture	1894
546	The Laundry	511 Vliet St	Laundry	1889
547	Thiele, Henry	Cor. Sixth and Chestnut	Hammocks	1865
548	Thomeier & Buess & Co	321 Fourth St	Carriages and Repairing	1893
549	Toepfer & Sons	80 Menomonie	Kiln Trap Doors and Tanks	1853
550	Trenkamp, F., & Co	209 Michigan St	Soap	1848
651	Troestel, Albert, & Sons	612 Commerce	Leather	1885
552	Troestel, Albert, & Sons	893 N. Water St	Leather	1865
553	Tuepke & Goetter	817 Teutonia St	Wagon and General Blacksmith	1888
554	Uhlein Bros	Polk and Jefferson	Malsters	1880
555	Ulrich, B., & Son	152 Second St	Coal and Wood	1880
556	Union Lithographing Co	144 Reed St	Lithographing	1896
557	Union R'y Transportation Co	Foot of Garfield Ave	Repair Cars	1894
558	Usinger, Fred	304 Third St	Sausage	1882
559	Utility Mfg. Co	183 Clinton St	Tin Lined Shipping Packages	1895
560	Van Dyke Knitting Co	225 S. Water St	Knit Goods	1884
561	Van Horn, Dan	537 Seventeenth St	Cut Glass Works	1887
562	Vass, Hermann	372 Milwaukee St	Blank Books	1874
563	Vienna Malt Coffee Co	1185 Teutonia	Malt Coffee	1893
564	Vilter Mfg. Co., The	680 Beecher St	Brooms	1893
565	Vogt & Killian S. & D. Co	576 Island Ave	Sash, Doors and Binds	1886
566	Voigt, Frank	1148 Eighth St	Brooms	1893
567	Wadham Oil & Grease Co	116 Fowler St	Railroad, Mill and Miners Sup	1875
568	Wagner, J. G.	514 Market St	Architectural Iron Work	1869
569	Wagner & Habermann	1728 Lloyd St	Wagons and Blacksmithing	1893
570	Wallmann	122 Sycamore St	Wood Jackets and Shipping Cans	1893
571	Walsh, F. A., & Co	Western City Limits and Vliet	Tinware	1891
572	Wandra, Theo	1026 Cold Spring Ave	Wood Carving	1894
573	Wauwatosa Carpet Cleaning Wks	City Limits and Vleit St	Cleaning Carpets	1893
574	Wauwatosa Steam Laundry	Wauwatosa	Laundry	1896
575	Weiner, E.	301 Seventh St	Upholstered Goods	1883

MILWAUKEE—Continued.

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
576	Weins, A. R., Co	1227 Vliet St	Brushes	1886
577	Weins, Brandt, Co	225 Cedar St	Bicycle Handles	1897
578	Weissenberger, John	225 Cedar St	Soda and Mineral Water	1885
579	Weissleder, H	429 Sixth Ave	Copper Smith	1885
580	Weissner, John	616 Winnebago St	Cooperage	1859
581	Weiss & Schmidt Pottery Co	Thirty-second and Cherry St	Flower Pots	1891
582	Weigel	320 Broadway	Bedding	1865
583	Welcome Laundry	266 Grove St	Laundry	1895
584	Wenzel, J. H., & Co	912 Walnut St	Job and Book Printing	1878
585	Werner, Schenk, Co	189 Fifth St	Brass Founders	1893
586	Werrbach, Louis	89 Biddle St	Soda and Mineral Water, etc	1870
587	West Co., H. H	389 E. Water St	Blank Books and Bindery	1889
588	Western Coal Co	Foot of Washington	Hard and Soft Coal	1893
589	Western Gear Co	Cor. Mich. and Milwaukee	Tools and Machinery	1896
590	Western, Hd. Mfg. Co	66 Third St	Gas and Gasoline Stoves	1896
591	Western Leather Co	878 Marshall St	Miners' Soles from Scrap Leather	1886
592	Western Paper Co	263 W. Water St	Decorative Paper	1884
593	Westlake, De LaHunt & Smith Co	173 Second St	Job Printing	1885
594	West Side Mfg. Co	3016 Walnut St	Sash, Doors, Binds, etc	1892
595	Wetzel, August & Bros	618 E. Water St	Job Printing	1885
596	Witnall & Rademaker	Canal St. and Muskego Ave	Sewer Pipe	1895
597	Wilse, John	East of Orchard St	Cut and Sawed Stone	1873
598	Willer Mfg. Co	Fourth and Cedar St	Sash, Doors and Blinds	1868
599	Wilmans Bros	19 Erie St	Lithographers	1891
600	Windsor Mfg. Co	Clinton St	Lead Pipe and Sheet Lead	1897
601	Wisconsin Bridge & Iron Co	North Milwaukee	Structural Iron Work	1888
602	Wisconsin Furniture Co	North Milwaukee	Furniture	1894
603	Wisconsin Iron and Wire Wks	184 E. Water St	Wire and Iron Goods	1893
604	Wisconsin Malleable Iron Co	South Bay St	Castings	1879
605	Wisconsin Milling Co	Virginia St	Corn Mill	1893
606	Wisconsin Preserve Co	310 Galena St	Preserves	1885
607	Wollaeger Mfg. Co	636 N. Water St	Interior Woodwork, Etc	1884

608	Wood's Steam Laundry	73 Thirteenth St	Laundry	1894
609	Worackek, Albert	191 Galena St	Wagons and Blacksmithing	1898
610	Wrench, B. F	1198 Fifth St	Shoes and Slippers	1889
611	Yenowine News	Cor. Mich. and Milwaukee	Publishing	1885
612	Yewdale, J. H., & Sons	46 Oneida St	Printers and Binders	1865
613	Young Brewing Co	Cor. Fifth and Cherry	Brewers	1854
6..	Young Brewing Co	Cor. Third and Sherman	Malting	1883
		1602 St. Paul Ave	Mirror Art Glass	1895
615	Zeidler, Wm			
616	Zeigler, George, Co	233 E. Water St	Candy	1861
617	Zimmermann, A	341 Sixteenth St	Laundry	1893
618	Zohrlaut Leather Co., H	793 N. Water St	Leather	1857
619	Zwietusch, Otto	Chestnut and Seventh St	Soda Fountain Machine	1858
620				
621	Claus Handle Bar Mfg. Co	Cor. Erie and East Water Sts	Adjustable Handle Bars	1897
622	Cramer Engraving Co	McKeogh Bldg	Engraving	1897
623	Dawe Bros	McKeogh Bldg	Job Printing	1897
624	Denhardt, Hugo	1406 Chambers St	Fancy Knit Goods	1897
625	Hammersmith Eng. Co	McKeogh Bldg	Engraving	1898
626	Helling Enameling Co., The	245 Oregon St	Enameling Bicycle Parts	1894
627	Milwaukee Handle Bar Co	Cedar St. near Sixth	Handle Bars	1898
628	Milwaukee Steel Casting Co	Clinton and Greenfield Ave	Steel Castings	1897
629	National Papier Mache Works	501 Broadway	Italian Papier Mache	1896
630	Perfection Binding Co., The	West Water St	Book Bindery	1898
631	Peters, G. A	Cor. Erie and East Water St	Experimental Machinery	1898
632	Polworth, F., & Bros	Cuwper Block	Music Typographers	1890
633	Rilling, John E	225 Reed St	Upholstering	1898
634	Rosenbauer Schawalder Plating Co	196 East Water	Nickel Plating	1897
635	Saveland Bros	Twelfth and St. Paul Ave	Bicycle Rims	1897
636	Siebert, Frank	722 Cedar St	Carpenter Contractor	1897
637	Stirn & Kasch	Cuwper Block	Engraving, Printing, Etc	1898

	Name of Firm.	Location.	Kind of Goods Made of Work Done.	Established.
638	Albany Linen Mill	Albany, Green Co	Mfg. Linen Toweling	1897
639	Albany Milling & Elec. Light Co	Albany, Green Co	Flour and Feed	1868
640	Albany Tannery	Albany, Green Co	Tanners	1888
641	Gapen, George W	Albany, Green Co	Mfg. Turkish Towels	1897
642	Ahnapee Furniture Co	Ahnapee, Kewaunee Co	Writing Desks, Furniture	1890
643	Ahnapee Record, The	Ahnapee, Kewaunee Co	Publishing and Printing	1886
644	Ahnapee Veneer Seating Co	Ahnapee, Kewaunee Co	All kinds of Veneer Seating	1892
645	Gablonsky Co	Ahnapee, Kewaunee Co	Cheese Boxes, Shingles, etc	....
646	Kelsey, M. A	Ahnapee, Kewaunee Co	Mfg. Fly Nets	1891
647	Wodsedalek, Jos	Ahnapee, Kewaunee Co	Machinist, Foundry, Elec. L	1895
648	Alma Brewing Co	Alma, Buffalo Co	Brewers	1890
649	Alma Milling Co	Alma, Buffalo Co	Flour and Feed	1888
650	Buffalo Co. Journal	Alma, Buffalo Co	Publishers and Printers	1861
651	Buffalo Co. Republikaner Pub. Co	Alma, Buffalo Co	Publishers and Printers	1861
652	Amberg Granite Co	Amberg, Marinette Co	Quarrying and Mfg. Granite	1889
653	Bettinger, F. C	Amberg, Marinette Co	Lumber and Shingles	......
654	Pike River Granite Co	Amberg, Marinette Co	Quarrying and Mfg. Granite	1896
655	Amery Elevator	Amery, Polk Co	Grain Elevator	1893
656	Amery Free Press	Amery, Polk Co	Publishers and Printers	1891
657	Amery Lumber Co	Amery, Polk Co	Lumber, Lath, Shingles	1888
658	Hockerson, Chas. W	Amery, Polk Co	Cigar Factory, No. 80	1895
659	Manohan, Thomas	Aniwa, Shawano Co	Lumber and Planing Mill	1887
660	Antigo Brewing Co	Antigo, Langlade Co	Brewers	1893
661	Antigo Edison Elec. Light Co	Antigo, Langlade Co	Electric Light for City	1888
662	Antigo Hub Mfg. Co	Antigo, Langlade Co	Hubs and Hoops	1892
663	Antigo Mfg. Co	Antigo, Langlade Co	Mfg. Stoves	1890
664	Antigo Novelty Mfg. Co	Antigo, Langlade Co	Ironing, Wash Boards, Etc	1892
665	Antigo Roller Mills	Antigo, Langlade Co	Mfg. Flour	1891
666	Antigo Screen Door Co	Antigo, Langlade Co	Mfg. Lumber	1892
667	Antigo Screen Door Co	Antigo, Langlade Co	Mfg. Screen Doors	1890
668	Antigo Steam Laundry	Antigo, Langlade Co	Laundry	1894
669	Crocker Chair Co	Antigo, Langlade Co	Chair Stock	1887

670	Crocker Chair Co.	Antigo, Langlade Co.	Hardwood Lumber	1880
671	Freyberger, L.	Antigo, Langlade Co.	Wagons and Sleighs	1888
672	Frost Veneer Seating Co.	Antigo, Langlade Co.	Veneer for all Kinds Seating	1891
673	Johns, W. B.	Antigo, Langlade Co.	Mill Machinery and Mill Supplies	1884
674	Kellogg, T. D., Lumber Mfg. Co.	Antigo, Langlade Co.	Lumber	1886
675	Kellogg, T. D., Lumber Mfg. Co.	Antigo, Langlade Co.	Planing Mill	1886
676	Millond Publishing Co.	Antigo, Langlade Co.	Pub. Weekly News Item	1885
677	Mitchell Bros.	Antigo, Langlade Co.	Lumber	1895
678	Ross Lumber Co.	Arbor Vitae, Vilas Co.	Lumber, Lath and Shingles	1893
679	Arcadia Electric Light Co.	Arcadia, Trempealeau Co.	Electric Lighting	1897
680	Arcadian, The	Arcadia, Trempealeau Co.	Publishers and Printers	1894
681	Arcadian Milling Co.	Arcadia, Trempealeau Co.	Flour and Feed, Grain Elevator	1890
682	Leader, The	Arcadia, Trempealeau Co.	Publishers and Printers	1893
683	Ashland Bottling Works	Ashland, Ashland Co.	Soft Drinks	1892
684	Ashland Brewing Co.	Ashland, Ashland Co.	Beer	1887
685	Ashland Cigar & Tobacco Co.	Ashland, Ashland Co.	Cigars	1875
686	Ashand Daily Press	Ashland, Ashland Co.	Publishing and Printing	1897
687	Ashland Iron & Steel Co.	Ashland, Ashland Co.	Pig Iron	1888
688	Ashland Lighting & St. Ry. Co.	Ashland, Ashland Co.	Light and St. Railway	1896
689	Ashland Lumber Co.	Ashland, Ashland Co.	Lumber	1893
690	Ashland Steam Laundry	Ashland, Ashland Co.	Laundry	1892
691	Ashland Sulpite Fibre Co.	Ashland, Ashland Co.	Sulphite Fibre	1893
692	Ashland Water Co.	Ashland, Ashland Co.	Supplying Water	1884
693	Betzer, Fred	Ashland, Ashland Co.	Cigars	1884
694	Chequamegon Ice Co.	Ashland, Ashland Co.	Ice	.....
695	C. &. N. W. Repair Shops	Ashland, Ashland Co.	Repair Shop	1887
696	Durfee, W. R.	Ashland, Ashland Co.	Lumber	.....
697	Kennedy, D. A.	Ashland, Ashland Co.	Lumber	1890
698	Keystone Lumber Co.	Ashland, Ashland Co.	Lumber and Lath	1889
699	Kruschke, H., & Co.	Ashland, Ashland Co.	Office Furniture	1888
700	Mowatt, D. W.	Ashland, Ashland Co.	Lumber	1885
701	Ohio Coal Co.	Ashland, Ashland Co.	Dealers in Coal	1887
702	Parish Mfg. Co.	Ashland, Ashland Co.	Mill Machinery	1885
703	Pennsylvania & Ohio Fuel Co.	Ashland, Ashland Co.	Coal Dealers	1887
704	Pope Lumber Co., Planing Mill	Ashland, Ashland Co.	Planing Lumber	1898
705	Pope Lumber Saw Mill	Ashland, Ashland Co.	Lumber, Lath and Shingles	1898
706	Scott & Taylor	Ashland, Ashland Co.	Sash, Doors and Blinds	1887
707	Standard Steam Laundry	Ashland, Ashland Co.	Laundry	1897
708	Wisconsin Central Ry. Shops	Ashland, Ashland Co.	Repair Shops	.....

	Name of Firm.	Location.	Kind of Goods Made of Work Done.	Established.
709	Appleton Calcic Carbide Co.	Appleton	Mfr. Calcic Carbide	1896
710	Appleton Chair Company	Appleton	Mfrs. Chairs and Rockers	1890
711	Appleton Electric Laundry	Appleton	Laundry	1897
712	Appleton Elec. L. &. P. Co.	Appleton	Light and Street Railway	1896
713	Appleton E. L. & P. Co., No. 2	Appleton	Light and Street Railway	1891
714	Appleton Evening Crescent	Appleton	Printing and Publishing	1853
715	Appleton Hay Tool Co.	Appleton	Mfr. Hay Tools and Hardware	1893
716	Appleton Knitting Co.	Appleton	Mfr. Knit Goods	1892
717	Appleton Machine Co.	Appleton	Mfr. Pulp and Paper Mill Mach.	1883
718	Appleton Pickle & Pre. Co.	Appleton Junction	Sauerkraut, Pickles, etc.	1893
719	Appleton Printing & Paper Co.	Appleton	Printing, Ruling and Binding	1896
720	Appleton Steam Laundry	Appleton	Laundry	1896
721	Appleton Volksfreund, German	Appleton	Publishing and Printing	1870
722	Appleton Water Works	Appleton	Water for City	1882
723	Appleton Wecker, German	Appleton	Publishing and Printing	1881
724	Appleton Screen Plate Co.	Appleton	Mfr. Screen Plate	1893
725	Appleton Shirt & Pants Co.	Appleton	Mfr. Shirts and Pants	1891
726	Appleton Wire Works	Appleton	Mfr. Brass Wire Cloth for Paper Mill	1896
727	Appleton Woolen Mill	Appleton	Mfr. Yarn and Paper Felts	1881
728	Atlas Paper Co.	Appleton	Print and Manilla Colored Paper	1878
729	Atlas Paper Co., Pulp Mills	Appleton	Ground Wood Pulp	1887
730	Eagle Mfg. Co.	Appleton	Hay Tools and Feed Cutters	1883
731	Fairbanks, J. S.	Appleton	Machinist	1842
732	Fox River Paper Co.	Appleton	Book and Writing Paper	1887
733	Kimberly & Clark Co.	Appleton	Printing and Book Paper	1883
734	Lake Superior Knit Works	Appleton	Knit Goods	1897
735	Lyons, B.	Appleton	Mfrs. Cigars	1872
736	Marston & Beveridge	Appleton	Mfrs. Hubs and Spokes	1883
737	Mauser & Renner Co.	Appleton	Planing Mill and Interior Wood Work	1881
738	The Mfr. Investment Co.	Appleton	Mfr. Sulphite Pulp	1891
739	Muench Brewing Co.	Appleton	Brewers	1874
740	Patten Paper Co., The	Appleton	Mfr. Print and Book Paper	1883
741	Patten Paper Co., The	Appleton	Mfr. Wood Pulp	1884
742	Post Publishing Co., The	Appleton	Publishing and Printing	1884
743	River Side Fiber Co., The	Appleton	Mfr. Bleached and Unbleached Sulphites	1898

744	L. C. Schmidt	Appleton	Mfr. Cigars and Tobacco	1872
745	A. Spenig	Appleton	Custom Woolens and Dyeing	1883
746	Star Brewery	Appleton	Brewers and Malsters	1880
747	John Stier	Appleton	Mfr. Cigars	1882
748	The Telulah Paper Co.	Appleton	Mfr. Print, Book and Ground Paper	1890
749	Union Toy & Furniture Co., The	Appleton	Mfr. Children's Wagons and Sleighs	1881
750	Valley Iron Wk. Mfg. Co., The	Appleton	Mfr. Engines and General Mill Works	1882
751	Webster & Son, W. M.	Appleton	Planing Mill and Job Work Paper Mill	1888
752	Western Screen Plate Works	Appleton	Mfr. Screen Plate	1879
753	Wicken Co., The	Appleton	Mfr. Office and Saloon Furniture	1891
754	Willy & Company	Appleton	Mfr. Flour	1881
755	Wisconsin Malt and Grain	Appleton	Malsters	1892
756	Fountain Lbr. Co., J	Appleton	Lumber	1898
757	Athens Mfg. Co	Athens, Marathon Co	Hoops and Saw Mill	1891
758	Braun, M., & Sons	Athens, Marathon Co	Hardwood Lumber and Staves	1891
759	Rietbrock & Halsey	Athens, Marathon Co	Lumber	....
760	Hussa Brewing Co	Bangor, La Crosse Co	Brewers	1858
761	Baraboo News Pub. Co	Baraboo, Sauk So	Publishers	1883
762	Bartz, August	Baraboo, Sauk So	Mfrs. of Cigars	1892
763	C. & N. W. R'y	Baraboo, Sauk So	Car Repairing	1871
764	Gem Steam Laundry	Baraboo, Sauk So	Laundry	1887
765	Island Woolen Co	Baraboo, Sauk So	Mfrs. Woolen Cloth	1865
766	McArthur & Son	Baraboo, Sauk So	Mfrs. Turkish Towels	1892
767	Sauk Co. Democrat	Baraboo, Sauk So	Printers and Publishers	1879
768	Barron Roller Mill	Barron, Barron Co	Flour and Feed	1884
769	Barron Stave & Heading Co	Barron, Barron Co	Mfrs. Heading	1891
770	Barron Woolen Mills	Barron, Barron Co	Genuine All Wool Flannels	1884
771	Holliday, R.	Barron, Barron Co	Lumber, Lath and Shingles	1894
772	Bayfield Co. Press, The	Bayfield, Bayfield Co	Publishers and Printers	1857
773	Booth, A., Packing Co	Bayfield, Bayfield Co	Oysters, Fish and Canned Goods	....
774	Pike, The R. D., Lumber Co	Bayfield, Bayfield Co	Lumber	1850
775	Wachmuth & Son	Bayfield, Bayfield Co	Mfrs. Dressed Lumber	1894
776	Eggert & Rassler	Bear Creek, Waupaca Co	Lumber, Planing Mill	1882
777	Murphy, P. D	Bear Creek, Waupaca Co	Feed Mill, Elevator	1891
778	Tyrell, George, & Son	Bear Creek, Waupaca Co	Shingle Mill, Planing, etc	1881
779	Brault, O.	Beaver Creek, Marinette Co	Lumber and Shingles	1897
780	Beaver Dam Cotton Mills	Beaver Dam	Mfrs. Cotton Sheeting	1882

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
781	Beaver Dam Malleable Iron Works	Beaver Dam	Mfg. Malleable Iron	1892
782	Beaver Dam Woolen Mills	Beaver Dam	Mfg. Woolen Cloth	1866
783	Beaver Dam Worsted Co	Beaver Dam	Mfg. Woolen Cloths	1883
784	Empire Roller Mills	Beaver Dam	Mfg. Flour and Feed	1847
785	Rowel, J. S., & Sons	Beaver Dam	Seeders, Drills and Fanning Mills	1855
786	Brimer, W. D	Beldenville, Pierce Co	Mfrs. Staves and Heading	1885
787	Kupske, Ferdinand	Belle Plain, Shawano Co	Mfg. Lumber	1894
788	Lang, Fred	Belle Plain, Shawano Co	Lumber and Hard Wood	1884
789	Webster, F. C., & Son	Belle Plain, Shawano Co	Mfg. Lumber	1891
790	Barrett Mfg. Co	Beloit, Rock Co	Building and Sheath Board Paper	1880
791	Beloit Carriage Works	Beloit, Rock Co	Sleighs, Carriages and Wagons	1871
792	Beloit Daily & Weekly News, The	Beloit, Rock Co	Publishing and Printing	1879
793	Beloit Electric Light Co	Beloit, Rock Co	Electric Light for City	1887
794	Beloit Free Press, The	Beloit, Rock Co	Publishing and Printing	1848
795	Beloit Iron Works, The	Beloit, Rock Co	Mfg. Paper Machinery	1857
796	Beloit Steam Laundry, The	Beloit, Rock Co	Laundry	1893
797	Berlin Machine Works, The	Beloit, Rock Co	Woodworking Machinery	1877
798	Besley, Chas. H., & Co	Beloit, Rock Co	Gardner's Disc, Grinders, etc	1888
799	Blodgett Milling Co	Beloit, Rock Co	Mfg. Brick, Wheat and Rye Flour	1849
800	Crohen, P. H	Beloit, Rock Co	Mfg. Cigars	1879
801	Cunningham Bros	Beloit, Rock Co	Sash, Doors, Blinds, etc	1873
802	Dowd, R. J	Beloit, Rock Co	Mfg. Machine Knives	1877
803	Dulhanty, F	Beloit, Rock Co	Mfg. Cigars	1893
804	Eureka Steam Laundry	Beloit, Rock Co	Laundry	1886
805	Excelsior Steam Laundry	Beloit, Rock Co	Laundry	1895
806	Fairbanks, Morse & Co	Beloit, Rock Co	Steam Engines, Pumps, etc	1885
807	Ferguson Bros	Beloit, Rock Co	Buggies and Sleighs	1892
808	Foster, John, Co	Beloit, Rock Co	Mfg. Ladies' Shoes	1870
809	Frantz, Chas	Beloit, Rock Co	Sheet Metal Works	1892
810	Frazer, H., & Co	Beloit, Rock Co	Machinist	1896
811	Gastan, M. B., & Son	Beloit, Rock Co	Platforms, Stock Scales, etc	1844
812	Gesley Mfg. Co	Beloit, Rock Co	Cultivators, Sulky Plows, etc	1890
813	Johnson, O. J	Beloit, Rock Co	Wagons, Carriages, etc	1876

814	Luson & Westrip	Beloit, Rock Co	Machinist	1890
815	Leonard, H. J., Mfg. Co	Beloit, Rock Co	Gloves and Mittens	1865
816	McEroy & Co., J. C	Beloit, Rock Co	Machinist and Founders	1884
817	Novelty Carriage Works	Beloit, Rock Co	Wagons and Carriages	1874
818	Oliver, Chas	Beloit, Rock Co	Mfg. Cigars	1884
819	Purvis, Thomas	Beloit, Rock Co	Mfg. Cigars	1882
820	Rock River Paper Mill, The	Beloit, Rock Co	Building and Wrapper Paper	1859
821	Rosenblatt, H., & Sons	Beloit, Rock Co	Shirts, Pants and Overalls	1879
822	Taylor Electric Light & Power Co	Beloit, Rock Co	Electric Light and Power	1891
823	Thompson, J., & Sons Mfg. Co	Beloit, Rock Co	Ole Olson Sulkies, Plows, etc	1861
824	Weed Lumber Co	Benoit, Bayfield Co	Mfrs. Lumber	1894
825	Advance Mch. Works	Berlin	Agricultural Implements	1894
826	Berlin Elec. Light Co	Berlin	Light	1891
827	Berlin Journal	Berlin	Printing and Publishing	1870
828	Berlin Canning & Pickle Co	Berlin	Pickling Cucumbers	1892
829	Johnson, Niels	Berlin	Machinist	1870
830	Berlin Glove & Mitten Co	Berlin	Gloves and Mittens	1892
831	Berlin & Montello Granite Co	Berlin	Building, Paving Stone, etc	1880
832	Berlin Whip Co	Berlin	Whips, Gloves and Mittens	1881
833	Hollis Stedman & Sons	Berlin	General Produce	1872
834	Luther Co., Henry	Berlin	Mfg. Brooms	1892
835	Russell Glove Co., The	Berlin	Gloves and Mittens	1897
836	Safford, M	Berlin	Produce Dealer	....
837	Stillman, Wright & Co	Berlin	Flour and Feed	1868
838	Wright, Chas. H	Berlin	Mfg. Pickles	1894
839	Tallcott Estate, F. B	Berlin	Gloves and Mittens	1895
840	Model Steam Laundry	Berlin	Laundry	1897
841	Morris, Chas. S	Berlin	Brick	1874
842	Murphy, J. E	Berlin	Butter Tubs, Cheese Boxes	1889
843	Styer, C. W	Berlin	Cigars	1883
844	McCanna & Frazer Co	Big Bend, Waukesha Co	Mfg. Butter	1891
845	McKenzie, Clarence	Big Bend, Waukesha Co	Hardwood Lumber and F. Mill	1855
846	Waukesha Hygeia Spring Co	Big Bend, Waukesha Co	Spring Water to Chicago	1890
847	Raepke & Meisner	Birnamwood	Lumber, Shingles and Ties	1889
848	Stacy & Toll	Birnamwood	Mfg. Lumber	1886
849	Vandoeren & Andrews	Birnamwood	Mfg. Lumber	1888
850	Vandoeren & Andrews	Birnamwood	Excelsior, Staves and Planing	1892
851	Hager, Chas. J	Black Creek	Cheese Boxes, Cisterns, etc	1892

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
852	Christenson, Ole	Bloomer, Chippewa Co	Planing Lumber	1890
853	Rasperson & Co	Bloomer, Chippewa Co	Feed and Grain Elevator	1891
854	Johnson, James, & Co	Boardman, St. Croix Co	Flour and Feed	1896
855	Behnke, Albert	Brillion, Calumet Co	Mfg. Lumber	1877
856	Brillion Furniture Co	Brillion, Calumet Co	Mfg. Tables	1889
857	Brillion Iron Works	Brillion, Calumet Co	Machinist and Casting	1893
858	Brillion Lumber & Mfg. Co	Brillion, Calumet Co	Planing Mill and Gen. Contract	1890
859	Brillion Roller Mills	Brillion, Calumet Co	Flour and Feed	1889
860	Brillion Wagon Factory	Brillion, Calumet Co	Wagons, Sleighs, Carriages	1887
861	Anderson, Lukas & Co	Brodhead, Green Co	Electric Light for City	1887
862	Barr, O. J	Brodhead, Green Co	Mfg. Wagons	1882
863	Bartlett & Sons	Brodhead, Green Co	Carriages, Wagons and Sleighs	1872
864	Brodhead Foundry and Mach. Shop	Brodhead, Green Co	Founders and Machinists	1868
865	Brodhead Independent	Brodhead, Green Co	Publishing and Printing	1861
866	Brodhead Steam Laundry	Brodhead, Green Co	Laundry	1897
867	Laube & Durner	Brodhead, Green Co	Wagons, Carriages and Repairs	1866
868	Pierce, George M	Brodhead, Green Co	Agricutural Implements	1873
869	Register, The	Brodhead, Green Co	Publishing and Printing	1883
870	Jenson, Ole	Brookville, St. Croix Co	Lumber and Shingles	1866
871	Burkhardt, C	Burkhardt, St. Croix Co	Hard Wheat Flour, etc	1888
872	Burlington Blanket Co	Burlington, Racine Co	Mfg. Horse Blankets	1891
873	Burington Brewery	Burlington, Racine Co	Brewers	1887
874	Burlington Brick & Tile Co	Burlington, Racine Co	Brick and Tile	1885
875	Burlington Machine Shop	Burlington, Racine Co	Foundry and Machinist	1878
876	Burlington Steam Laundry	Burlington, Racine Co	Laundry	1897
877	Empire Steam Laundry	Burlington, Racine Co	Laundry	1892
878	Holmes, Ben	Burlington, Racine Co	Mfg. Cigars	1883
879	Kline, F. G., Co	Burlington, Racine Co	Vichy Spring, and Bottling Works.	1857
880	McKenna, Fraser Co	Burlington, Racine Co	Mfg. Butter	1881
881	Pieters, W. J	Burlington, Racine Co	Wagons and Repairing	1872
882	Smithers & Harris Co	Burlington, Racine Co	Mfg. Ironing Tables, Clothes Racks, etc.	1893

883	Voorhees, E. S.	Burlington, Racine Co.	Tubs, Tanks and Sorghum	1866
884	Zwiebel, A., & Sons	Burlington, Racine Co.	Clothes Racks, Ironing Boards	1857
885	Hoskins, L. S.	Barnum	Lumber	1886
886	Bell Center Stave Co.	Bell Center	Staves and Heading	1890
887	Tate, W. W., & Co.	Bell Center	Lumber	1880
888	Ableiter, M	Boscobel	Wagons and Sleighs	1866
889	Boscobel Brewery	Boscobel	Beer	1895
890	Boscobel Roller Mills	Boscobel	Flour and Feed	1897
891	Botten, L. P.	Boscobel	Machinists	1897
892	Dial-Enterprise, The	Boscobel	Publishing and Printing	1887
893	Nelson, Wm.	Boscobel	Wool and Yarn	1897
894	Ruka Bro. Mfg. Co. Lmt.	Boscobel	Brick	1879
895	Ruka Bro. Mfg. Co., Plant A	Boscobel	Wagons and sleighs	1879
896	Ruka Bro. Mfg. Co., Plant B	Boscobel	Lumber	1883
897	Rustic Novelty Works	Boscobel	Rustic Chairs	1891
898	Birkholdz, E. A.	Cameron Jct. Barron Co.	Mfrs. Feed	1892
899	Cashton Milling Co.	Cashton, Monroe Co.	Mfg. Flour and Feed	1891
900	Mitby, P. E.	Cashton, Monroe Co.	Grain Elevator	1897
901	Cato Creamery	Cato, Manitowoc Co.	Mfg. Butter	1891
902	Killen, W. N.	Cato, Manitowoc Co.	Mfg. Cheese Boxes	1877
903	Isstos, Frank	Cecil Shawano Co.	Lumber, Posts, R. R. Ties, etc.	1887
904	Cedarburg Brewery	Cedarburg, Ozaukee Co.	Brewers	1872
905	Cedarburg Furniture Co.	Cedarburg, Ozaukee Co.	Tables and Office Furniture	1893
906	Cedarburg Wire Nails and Screw Co.	Cedarburg, Ozaukee Co.	Mfg. Wire Nails	1890
907	Cedarburg Woolen Mills, The	Cedarburg, Ozaukee Co.	Blankets and Worsted Yarn	1864
908	Columbia Mills	Cedarburg, Ozaukee Co.	Flour and Feed	1850
909	Excelsior Shoe & Slipper Co.	Cedarburg, Ozaukee Co.	Mfg. Shoes and Slippers	1890
910	Hilgen Mfg. Co., The	Cedarburg, Ozaukee Co.	Sash, Doors and Blinds	1872
911	Schroeder Roller Mills	Cedarburg, Ozaukee Co.	Mfg. Flour	1855
912	Ziehane, Frank, Co.	Cedarburg, Ozaukee Co.	Ziehane Coffee Essence	1890
913	Knapp, Stout & Co.	Cedar Falls, Dunn Co.	Lumber, Lath and Shingles	1883
914	Gearhart, A. A.	Chelsea, Taylor Co.	Lumber, Lath and Shingles	1889
915	Dorschel Schultz Co.	Chilton, Calumet Co.	Sash, Doors and Blinds	1883
916	Duemke & Raasch	Chilton, Calumet Co.	Flour and Feed	1879
917	Gieraw & Hoch	Chilton, Calumet Co.	Brewers and Malsters	1869
918	Hugo, C. M.	Chilton, Calumet Co.	Mfg. Cigars	1880
919	Union Roller Mill	Chilton, Calumet Co.	Mfg. Flour	1875

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
920	Vohldrick, A. H	Chilton, Calumet Co	Founders and Repair Machine	1877
921	Champion Bros	Chippewa, Bloomer Township	Mfg. Lumber	1895
922	Chippewa Falls Gas & Water Wks. Co	Chippewa Falls, Chippewa Co	Supplying Water and Gas	.....
923	Chippewa Lumber & Boom Co	Chippewa Falls, Chippewa Co	Lumber	1879
924	Consolidated Milling Elevator & Power Co.	Chippewa Falls, Chippewa Co	Flour and Feed	1872
925	Leinenkugel, Jacob	Chippewa Falls, Chippewa Co	Mfrs. Beer	1867
926	South Side Mfg. Co	Chippewa Falls, Chippewa Co	Window Frames and Mouldings	1892
927	Stanley, F. G., & C. A	Chippewa Falls, Chippewa Co	Sash, Doors and Machine Shop	1888
928	Courier, The	Clear Lake, Polk Co	Publishers and Printers	1897
929	Bennett, G. P	Clintonville, Waupaca Co	Mfg. Broom Handles	1883
930	Carter, E	Clintonville, Waupaca Co	Mfg. Shingles	1894
931	Clintonville Steam Laundry	Clintonville, Waupaca Co	Laundry	1896
932	Clintonville Tribune	Clintonville, Waupaca Co	Publishing and Printing	1882
933	Larson & Shaver	Clintonville, Waupaca Co	Flour and Feed	1892
934	Rohrer, L. O	Clintonville, Waupaca Co	Lumber, Grist Mill	1887
935	Rohrer, David	Clintonville, Waupaca Co	Sash, Doors, and Planing Mill	1887
936	Wall, Spalding & Wall	Clintonville, Waupaca Co	Saw Cedar Post and Blocks	1886
937	Zachow & Bessardich	Clintonville, Waupaca Co	General Machinists	1891
938	Bolles, E. E., & Co	Coleman, Marinette Co	Mfg. Lumber	1889
939	Kruth, J. H., & Co	Columbus	Beer and Malt	1858
940	Combined Locks Paper Co	Combined Locks, Outagamie Co	Wood Pulp and Paper	1891
941	Beaver Dam Lumber Co	Cumberland, Barron Co	Lumber, Lath, Shingles	1880
942	Cumberland Milling Co	Cumberland, Barron Co	Mfrs. Flour and Feed	1890
943	Keyes & Cole	Cumberland, Barron Co	Mfrs. of Heading	1896
944	Colby Lumber Co	Colby, Marathon Co	Lumber	.....
945	Colby Mfg. Co	Colby, Marathon Co	Tables and Saloon Fixtures	1895
946	Peterson, N. P., Mfg. Co	Colby, Marathon Co	Wagons	1896
947	Sigelke & Petty Co	Dancy, Portage Co	Lumber and Lath	1879

948	Darlington Democrat Pub. Co.	Darlington, Lafayette Co.	Publishing and Printing	1866
949	Darlington Electric Light & Water Co.	Darlington, Lafayette Co.	Light and Water for City	1896
950	Darlington Republican	Darlington, Lafayette Co.	Publishing and Printing	1860
951	McCarville & Gunner	Darlington, Lafayette Co.	Feed Mill, Flour	1896
952	Robinson, Mrs. J. G.	Darlington, Lafayette Co.	Grist Mill	1883
953	Roslip & Mika	Darlington, Lafayette Co.	Mfg. Cigars	1892
954	Buckley Bros	Delavan, Walworth Co.	Laundry	1896
955	Delavan Light & Fuel Co.	Delavan, Walworth Co.	Electric Light	1893
956	Delavan Mill Co., The	Delavan, Walworth Co.	Mfg. Flour and Feed	1849
957	Delavan Republican, The	Delavan, Walworth Co.	Publishing and Printing	1863
958	Reader, J. B.	Delavan, Walworth Co.	Mfg. Tanks and Wind Mills	1885
959	Reed Ice Cream Co., The	Delavan, Walworth Co.	Mfg. Ice Cream	1893
960	Van Velzer, W. C.	Delavan, Walworth Co.	Mfg. Cigars	1897
961	Dousman Milling Co., J. P.	De Pere, Brown Co.	Flour and Feed	1853
962	Dunham & Smith	De Pere, Brown Co.	Feed Mill	1891
963	Johann, J. W., & Son	De Pere, Brown Co.	Sash, Doors and Blinds	1874
964	Lawton, C. A.	De Pere, Brown Co.	Foundry and Machine Shop	1878
965	Shattuck & Babcock Co.	De Pere, Brown Co.	Mfg. Paper	1892
966	Downing Mfg. Co.	Downing, Dunn Co.	Lumber, Lath and Shingles	1885
967	Knapp, Stout & Co.	Downsville, Dunn Co.	Mfgs. Lumber	1865
968	Rust Owen Lumber Co.	Drummond, Bayfield Co.	Lumber, Lath and Shingles	1882
969	Duck Creek Stone Quarry	Duck Creek, Brown Co.	Quarrying Bldg. and Bridge Stone	1873
970	C. & N. W. R. R. Co. Stone Quarry	Duck Creek, Brown Co.	Quarrying Bldg. and Bridge Stone	1876
971	Crevcoura Bros.	Duck Creek, Brown Co.	Mfg. Brick	1880
972	Girard Lumber Co.	Dunbar, Marinette Co.	Mfgrs. and Dealers	1888
973	Dundas Butter & Cheese Co.	Dundas, Calumet Co.	Butter and Cheese	1894
974	Wollfinger Cheese Box Factory	Dundas, Calumet Co.	Cheese Boxes, Butter Pails	1880
975	Ellingson & Bros.	Dorchester, Clark Co.	Lumber, Lath and Shingles	1897
976	Bonell, William, & Son	Eau Claire	Mfrs. and Dealers Carriages, etc.	1868
977	Chippewa Valley Elec. Ry. Co.	Eau Claire	Street Railway	1896
978	City Steam Laundry	Eau Claire	Laundry	1893
979	Cutter, A. A.	Eau Claire	Driving Shoes and Sporting Goods	1883
980	Daily Telegram, The	Eau Claire	Printers and Publishers	1894
981	Dells Lumber Co.	Eau Claire	Lumber	1881
982	Dells Paper & Pulp Co.	Eau Claire	Mfrs. Paper and Pulp	1894
983	Derge, J.	Eau Claire	Cigars	1875

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
984	Drummond Bros.	Eau Claire	Beef and Pork Packers	1872
985	Eau Claire Boiler Works	Eau Claire	Boilers, Tanks, Heaters, etc	1889
986	Eagle Brewing Co.	Eau Claire	Brewers	1891
987	Eau Claire Book & Sta. Co.	Eau Claire	Job Printers and Mfrs. Stationery	1885
988	Eau Claire Box Shook & Lum. Co.	Eau Claire	Box-Shooks and Lumber	1894
989	Eau Claire Elec. Light & Power Co.	Eau Claire	Mfrs. Water and Light	1890
990	Eau Claire Gas Light Co.	Eau Claire	Mfrs. of Gas	1877
991	Eau Claire Linen Co.	Eau Claire	Linen Crash and Turkish Towels	1888
992	Empire Lumber Co.	Eau Claire	Lumber Mfrs.	1857
993	Fish, E. M., & Co.	Eau Claire	Mfrs. Sash and Doors	1867
994	Half Moon Lake Shingle & Fuel Co.	Eau Claire	Shingles and Wood	1893
995	Herold, Der	Eau Claire	Publishers and Printers	1890
996	Kurven Dress Stay Co.	Eau Claire	Mfrs. Dress Stays	1894
997	Lake Side Elevator Co.	Eau Claire	Elevator for Grain and Mfrs. Feed	1871
998	Leader Co., The	Eau Claire	Publishers and Printers	1881
999	Linderman Box & Veneer Co., The	Eau Claire	Boxes, Box Shooks and Veneer	1896
1000	Lister, William	Eau Claire	Mfrs. of Stone Work	1894
1001	Madison Street Mfg. Co.	Eau Claire	Contractors and Builders	1885
1002	McDonough Mfg. Co.	Eau Claire	Saw Mill Machinery	1889
1003	National Electric Light Co.	Eau Claire	Dynamos, Motors, etc	1888
1004	Northwestern Lumber Co.	Eau Claire	Lumber, Lath and Shingles	1865
1005	Pioneer Furniture Co.	Eau Claire	Furniture	1888
1006	Phoenix Mfg. Co.	Eau Claire	Woodwork, Foundry, etc	1875
1007	Reform, The	Eau Claire	Printers and Publishers	1894
1008	Shaw, N., & Co.	Eau Claire	Saw Mill Machinery	1859
1009	Shaw, Daniel, Lumber Co.	Eau Claire	Lumber	1857
1010	Shaw, Daniel, Lumber Co.	Eau Claire	Lumber, Lath and Shingles	1857
1011	Valley Lumber Co.	Eau Claire	Lumber, Lath and Shingles	1857
1012	Walter, J., & Co.	Eau Claire	Brewers	1890
1013	West & Watersdorf	Eau Claire	Cigars	1888
1014	Wisconsin Refrigerator Co.	Eau Claire	Refrigerators	1889

1015	Edgar Pressed Brick Co.	Edgar, Marathon Co.	Mfg. Brick	1891
1016	Guaw Lumber Co.	Edgar, Marathon Co.	Mfg. Lumber	1890
1017	Hoenisch, Ernst	Edgar, Marathon Co.	Mfg. Lumber	1895
1018	Menasha Woodenware Co.	Edgar, Marathon Co.	Staves and Heading	1893
1019	Leary, Jos. J.	Edgerton, Rock Co.	Mfg. Cigars	1895
1020	Parr, Royal	Edgerton, Rock Co.	Mfg. Brick	1879
1021	Pauline Pottery Co.	Edgerton, Rock Co.	Pottery, Electric Cups, Filters	1888
1022	Wisconsin Tobacco Reporter	Edgerton, Rock Co.	Publishing and Printing	1864
1023	Ingersoll Land Co.	Eland Jct., Shawano Co.	Planing Mill	1887
1024	Ingersoll Land Co.	Eland Jct., Shawano Co.	Mfg. Lumber	1890
1025	Rideant, W. K.	Eland Jct., Shawano Co.	Mfg. Lumber	1882
1026	Elkhorn Dairy Co.	Elkhorn, Walworth Co.	Mfg. Butter	1875
1027	Elkhorn Independent, The	Elkhorn, Walworth Co.	Publishing, Printing	1851
1028	Elkhorn Tank & Woodenware Co.	Elkhorn, Walworth Co.	Mfg. Tanks	1897
1029	Kachel West Co.	Elkhorn, Walworth Co.	Mfg. Cheese Boxes	1888
1030	Opitz, Fred	Elkhorn, Walworth Co.	Mfg. Sleighs and Wagons	1854
1031	Sprague Bros.	Elkhorn, Walworth Co.	Brick, Tiles and Paving Brick	1886
1032	Williams Zurevel Co.	Elkhorn, Walworth Co.	Machine Work	1897
1033	Zech, H., & Co.	Ellis Jct., Marinette Co.	Lumber, Lath and Shingles	1896
1034	Nelson & Devoe	Elmhurst, Shawano Co.	Lumber and Staves	1882
1035	Wunderlick, George	Elmhurst, Shawano Co.	Lumber	1882
1036	Elmwood Mfg. Co.	Elmwood Pierce Co.	Mfg. Basswood Panels	1896
1037	Kelley & Haagensen	Elmwood Pierce Co.	Mfrs. Lumber	1897
1038	Ellsworth Mfg. Co.	Ellsworth, Pierce Co.	Baskets and Excelsior	1891
1039	Decker & Smith	Embarrass, Waupaca Co.	Lumber, Lath and Shingles	1889
1040	Delany, George	Embarrass, Waupaca Co.	Carding Wool	1894
10..	Baker Mfg. Co.	Evansville, Rock Co.	Pumps, Windmills, etc.	1873
1042	Morgan, J. W., & Co.	Evansville, Rock Co.	Carryalls, Phaetons, etc.	1887
1043	Gerry Lumber Co.	Eagle River, Vilas Co.	Lumber, Lath and Shingles	....
1044	Neville, W. D.	Eagle, Vilas Co.	Shingles	1895
1045	Jones, G. N., Lumber Co.	Elcho, Langlade Co.	Lumber, Lath and Shingles	1894
1046	Forster, N. C., Lumber Co., The	Fairchild, Clark Co.	Lumber, Flour and Feed	1876

	Name of Firm.	Location.	Kinds of Goods Made or Work Done.	Estab-lished.
1047	Hammond Bros.	Farm Hill, Pierce Co.	Hardwood Lumber	1885
1048	Fenwood Lumber Co.	Fenwood, Marathon Co.	Mfg. Lumber	1892
1049	Fenwood Lumber Co.	Fenwood, Marathon Co.	Planing Mill	1895
1050	Allen & Treleven	Fond du Lac	Merchant Miller	1890
1051	Bates, C. E.	Fond du Lac	Mfr. of Boxes	1883
1052	Bowen Mfg. Co., The	Fond du Lac	Refrigerators and Furniture	1893
1053	Bechaud Brewing Co.	Fond du Lac	Brewers	1872
1054	Burrows, George S., & Co.	Fond du Lac	Carriage Tops and Trimmings	1879
1055	Commonwealth Printing Co.	Fond du Lac	Publishers	1885
1056	Cooper Blanket Co.	Fond du Lac	Mfrs. Horse Blankets	1893
1057	Eureka Steam Laundry	Fond du Lac	Laundry	1885
1058	Fond du Lac Electric Co.	Fond du Lac	Electric Light and Power	1896
1059	Fond du Lac Implement Co.	Fond du Lac	Agricultural Implements	1894
1060	Fond du Lac Malt & Grain Co.	Fond du Lac	Mfrs. of Malt	1890
1061	Fond du Lac Shirt Co.	Fond du Lac	Mfrs. of Shirts	1896
1062	Fond du Lac Steam Laundry	Fond du Lac	Laundry	1881
1063	Fond du Lac Table Mfg. Co.	Fond du Lac	Mfrs. of Tables	1894
1064	Furstnow, A. H., & Co.	Fond du Lac	Mfrs. of Jewelry	1888
1065	Gas Light Co. of Fond du Lac	Fond du Lac	Mfrs. of Gas	1863
1066	Giddings & Lewis Mfg. Co.	Fond du Lac	Saw Mill Machinery	1869
1067	Globe Cigar Mfg. Co., The	Fond du Lac	Cigars	1882
1068	Gurney Refrigerator Co.	Fond du Lac	Refrigerators	1890
1069	Haber, P. B., Printing House	Fond du Lac	Book, Job and Show Printing	1879
1070	Harrison Postal Bag Co	Fond du Lac	P. O. Bag Racks, Mail Car, etc.	1879
1071	Huber & Fuhrman Drug Mills	Fond du Lac	Botanic Drug Mill	1864
1072	Koehn, Jos.	Fond du Lac	Mfrs. Paper Boxes	1892
1073	Lange, L. A.	Fond du Lac	Publishers and Printers	1856
1074	Moletor, M. & M.	Fond du Lac	Carriages and Wagons	1876
1075	Moore & Galloway Lumber Co., Ltd.	Fond du Lac	Lumber, Sash and Doors	1864
1076	Nordwestlicher Courier	Fond du Lac	Newspaper and Job Printing	1871
1077	Rueping, Fred, Leather Co.	Fond du Lac	Mfrs. of Leather	1864
1078	Steenberge, O. C., Co.	Fond du Lac	Sash, Doors and Blinds	1871

1079	Strascino Piano Co.	Fond du Lac	Instruments and Pianos	1895
1080	Sweet, B. F. & H. L. Co.	Fond du Lac	Wagons, Sleds, etc.	1855
1081	U. S. Mfg. Co.	Fond du Lac	U. S. Cyclometers and Odometers	1895
1082	Wafer Yeast Co.	Fond du Lac	Yeast	1895
1083	Wild, B., Factory	Fond du Lac	Crackers and Confectionery	1859
1084	Winnebago Furniture Co.	Fond du Lac	Furniture	1890
1085	Cornish, Curtis & Green Mfg. Co.	Ft. Atkinson, Jefferson Co.	Dairy Implements	1865
1086	Ft. Atkinson Brick Mfg. Co.	Ft. Atkinson, Jefferson Co.	Brick and Tile	1891
1087	Fort Steam Laundry, The	Ft. Atkinson, Jefferson Co.	Laundry	1894
1088	Hoard's Creamery	Ft. Atkinson, Jefferson Co.	Mfg. Butter	1886
1089	Northwestern Mfg. Co.	Ft. Atkinson, Jefferson Co.	Chairs, Wagons and Sleighs	1866
1090	Pounder, George H.	Ft. Atkinson, Jefferson Co.	Mfg. Brooms and Harrows	1873
1091	Wilcox & Richards Co.	Ft. Atkinson, Jefferson Co.	Grain Elevators, Feed Mills	1882
1092	Wis. Butter Tub Co.	Ft. Atkinson, Jefferson Co.	Mfg. Butter Tubs	1894
1093	Zanger & Hoffmann	Ft. Atkinson, Jefferson Co.	Feed Mill and Grain Elevator	1888
1094	Foss, Martin L.	Foss Spur, Lincoln Co.	Mfg. Lumber	1891
1095	Alert Mill, The	Fountain City, Buffalo Co.	Flour and Feed	1895
1096	Bohri, F., & Son	Fountain City, Buffalo Co.	Elevator	1895
1097	Dressendoerfer, Andrew	Fountain City, Buffalo Co.	Wagons and Plows	1887
1098	Fountain City Brewing Co.	Fountain City, Buffalo Co.	Mfrs. of Beer	1887
1099	Roettiger, H., & F.	Fountain City, Buffalo Co.	Contractors and Builders	1883
1100	Schneider, George	Fountain City, Buffalo Co.	Mfrs. Cigars	1889
1101	Alard & McQuire	Green Bay	Vinegar, Pickles, etc.	1893
1102	Allouez Natural Mineral Water	Green Bay	Soda and Seltzer Water, Ginger Ale	1886
1103	Annenn, J. P., Candy Co.	Green Bay	Mfg. Candy	1886
1104	Britton, D. W.	Green Bay	Cooperage	1850
1105	Burns, D. M., & Son	Green Bay	Mfg. Boilers	1865
1106	Cainte, A. J.	Green Bay	Mfg. Dry Mineral Paint	1895
1107	Cargill, N. W., Co.	Green Bay	Grain Elevator	1865
1108	Carlton & Fowles	Green Bay	Boat Builders and Repairers	1875
1109	C., M. & St. P. Shops and Round House	Green Bay	Locomotive and Car Repairers	1878
1110	Diamond Match Co.	Green Bay	Mfg. Lumber	1897
1111	Diamond Match Co.	Green Bay	Planing Mill	1897
1112	Johannes Bros. Spice & Coffee Mills	Green Bay	Coffee and Spices	1884
1113	Dieckmann & Schober Mfg. Co.	Green Bay	Sash, Doors, Mouldings, etc.	1866
1114	Dobry, J. W.	Green Bay	Mfg. Lumber	1893
1115	Eberling, J. H.	Green Bay	Mfg. Flour	1877

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1116	Fiedler & Collins	Green Bay	Printers	1894
1117	Finegan, Wm., Brick Mfg. Co	Green Bay	Mfg. Brick	1892
1118	Fox River Electric St. R'y Co	Green Bay	Power for St. Ry	1893
1119	Fox River Electric St. Ry		Eectric Lights	1895
1120	Green Bay Advocate Co	Green Bay	Publishing, Printing, etc	1846
1121	Green Bay Carriage Co	Green Bay	Buggies, Carriages	1890
1122	Green Bay Gazette, The	Green Bay	Publishing and Printing	1866
1123	G. B. & Ft. H. Gas & Electric Light Co	Green Bay	Gas and Electric Light	1886
1124	Green Bay Planing Mill Co	Green Bay	Building Material	1890
1125	Green Bay Steam Laundry	Green Bay	Laundry	1892
1126	Green Bay Water Works	Green Bay	Water for City	1886
1127	G. B. & W. R. R'y Shops & Rd. House	Green Bay	Cars and Locomotives	1872
1128	Hagemeister Brewing Co	Green Bay	Brewers and Malsters	1866
1129	Handler, J. J	Green Bay	Soda, Seltzer, Mineral Waters	1876
1130	Henderson, Robt., Co	Green Bay	Grinding Paint	1883
1131	Hermann, John, & Son	Green Bay	Book Bindery and Ruling	1842
1132	Hess, Geo. B., Co	Green Bay	Flour	1893
1133	Hoberg Co., The	Green Bay	Toilet Paper	1893
1134	Hocker, Jos.	Green Bay	Brick	1888
1135	Hocker, John	Green Bay	Brick and Tile	1859
1136	Hohgrave Brewing Co	Green Bay	Brewer	1877
1137	Howard Foundry & Machine Shop	Green Bay	Founders and Machine Shop	1868
1138	Hurlburt, F.	Green Bay	Coal, Wood and Oil	1873
1139	Industrial Iron Works	Green Bay	Machines	1897
1140	Kemnitz Furniture Co., The	Green Bay	Furniture	1883
1141	Larson, William	Green Bay	Pickles, Canning Vegetables	1893
1142	McCormick & Flatley	Green Bay	Grain, Flour, Coal	1885
1143	McDonald, H.	Green Bay	Lumber, Lath, Shingles	1881
1144	McDonald, H.	Green Bay	Planing Mill	1881
1145	Milwaukee Sanding Mach. Co	Green Bay	Sanding Machines	1895
1146	Mueller Bros. & Co	Green Bay	Sash, Doors, Blinds, etc	1890
1147	Murphy Lumber Co	Green Bay	Lumber, Shingles, Lath	1886
1148	Murphy Lumber Co	Green Bay	Boxes	1894

1149	O'Leary Bros.	Green Bay	Boilers	1878
1150	Rohr, Henry, Sons	Green Bay	Brewers and Malsters	1866
1151	Root, E.	Green Bay	Book Bindery and Job Printing	1880
1152	Rothe, Joseph F.	Green Bay	Foundry	1893
1153	Schmidt, J. P. C.	Green Bay	Ginger Ale, Soda, Seltzer, etc	1884
1154	Schunck, Jr., Chas.	Green Bay	Cigars	1845
1155	Schwartz, C. S., & Son	Green Bay	Machine Shop and Foundry	1888
1156	Stumbel Brick Co.	Green Bay	Brick	1868
1157	Weise Furniture Co.	Green Bay	Furniture	1892
1158	Wing, Sam	Green Bay	Laundry	1870
1159	Wirtz & Schmidt	Green Bay	Cigars	1892
1160	Van Dyke, O., Brewing Co.	Green Bay	Brewers and Malsters	1872
1161	Montreal R. Lumber Co.	Gile, Iron Co.	Lumber, Lath, Shingles	1888
1162	Jenson, Elias, Saw Mill	Gilman P. O., Pierce Co.	Hardwood Lumber	1895
1163	Mathison Bros	Gilman P. O., Pierce Co.	Hardwood Lumber	1893
1164	Switzer, W. F.	Glen Flora, Chippewa Co.	Lumber, Lath, Shingles	1893
1165	Glenwood Mfg. Co.	Glenwood, St. Croix Co.	Lumber, Wagon and Barrel Stock	1885
1166	Tribune, The	Glenwood, St. Croix Co.	Publishers and Printers	1888
1167	Grafton Mills	Grafton, Ozaukee Co.	Flour and Feed	1895
1168	Grafton Tannery Co.	Grafton, Ozaukee Co.	Glove Leather	1895
1169	Johnson, Martin	Gratiot, Green Co.	Feed Mill	1885
1170	Baily, B. L.	Greenwood, Clark Co.	Lumber	1895
1171	Coerper & Leach	Hartford, Washington Co.	Sheep and Deer Skin Tanners	1895
1172	Hartford Plow Works	Hartford, Washington Co.	Horse Powers and Plows	1881
1173	Kendall & Co., J. O.	Hartford, Washington Co.	Mfg. Flour	1872
1174	Landenstein, A. G.	Hartford, Washington Co.	Malsters	1892
1175	Nehrbass Casket Co.	Hartford, Washington Co.	Mfg. Caskets	1879
1176	Partz Bros.	Hartford, Washington Co.	Malsters	1892
1177	Partz & Werner	Hartford, Washington Co.	Brewers	1874
1178	Uber Bros. & Co.	Hartford, Washington Co.	Brick, Sheepskin Leather	1882
1179	Hatch, E. D.	Hatchville, Dunn Co.	Mfrs. of Lumber	1891
1180	Cross Badger Co.	Hawthorne, Douglas Co.	Mfg. Lumber	1890
1181	Hayward Water Works	Hayward, Sawyer Co.	City Water	1890
1182	Northern Grain Co.	Hayward, Sawyer Co.	Flour and Feed	1887
1183	North Wisconsin Lumber Co.	Hayward, Sawyer Co.	Lumber, Lath and Shingles	1880

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1184	Yawkey Lumber Co.	Hazelhurst	Lumber, Lath, Shingles, etc.	1889
1185	East Side Lumber Co.	Houlton, St. Croix Co.	Lumber, Lath and Shingles	1888
1186	Van Braunt & Wilkins Mfg. Co.	Horicon	Farm Implements	1869
1187	Muskeg Lumber Co.	Hornersville, Bayfield Co.	Lumber	1896
1188	Buchmann Bros	Hortonville, Outagamie Co.	Flour and Feed	1896
1189	Diestler Co., Limited, The	Hortonville, Outagamie Co.	Building Material	1889
1190	Diestler Co., Limited, The	Hortonville, Outagamie Co.	Mfg. Lumber	1870
1191	Fountain Roller Mills	Hortonville, Outagamie Co.	Flour and Grist Mill	1844
1192	Parcher & Smith	Hatley	Mfg. Lumber	1881
1193	Babcock & Smith	Houghton, Bayfield Co.	Stone Quarry	1885
1194	Prentice Brown Stone Co., The	Houghton, Bayfield Co.	Stone	1888
1195	C., St. P., M. & O. Ry	Hudson, St. Croix Co.	Mfrs. Freight Cars and Gen. Rep.	1890
1196	Egloff, William A.	Hudson, St. Croix Co.	Mfrs Cigars	1890
1197	Enterprise Steam Laundry	Hudson, St. Croix Co.	Laundry	1897
1198	Hudson Saw Mill Co.	Hudson, St. Croix Co.	Mfrs. Lumber	1889
1199	Hudson Star & Times	Hudson, St. Croix Co.	Publishing and Printing	1854
1200	Interstate Mfg. Co.	Hudson, St. Croix Co.	Bee Hives, Sections, Cases, etc.	1897
1201	Turner, William	Hunting, Shawano Co.	Lumber and Shingles	1888
1202	Hurley Steam Boiler Wks.	Hurley, Iron County	Mfrs. Steam Boilers	1886
1203	Iron Co. Republican, The	Hurley, Iron County	Printers and Publishers	1893
1204	Montreal River Miner, The	Hurley, Iron County	Printers and Publishers	1885
1205	Ruplinger Bros., & Co.	Hewett, Wood County	Heading and Staves	......
1206	Sempson & Gould	Herbster, Bayfield Co.	Logging Contractors	1895
1207	Fricker, William	Independence, Buffalo Co.	Mfrs. Beer	1891
1208	Independence News-Wave	Independence, Buffalo Co.	Publishers and Printers	1877
1209	Meyers, S. M., & Co.	Independence, Buffalo Co.	Mfrs. Flour and Feed	1877

1210	Wisconsin Good Templar	Independence, Buffalo Co	Publishers and Printers	1891
1211	French Lumber Co	Ingram, Chippewa Co	Mfrs. Lumber, Lath and Shingles	1889
1212	Iron River Pioneer	Iron River, Bayfield Co	Mfrs. Lumber, Lath and Shingles	1892
1213	Lea Ingram Lumber Co., The	Iron River, Bayfield Co	Publishers and Printers	1888
1214	Rielly Nolan Lumber Co	Iron River, Bayfield Co	Mfrs. Lumber	1892
1215	Coffin Box & Lumber Co	Irvington, Dunn County	Mfrs. Boxes, Baskets and Lumber	1891
1216	Chicago & N. W. R. R. Repair Shops	Janesville, Rock County	Repairing Cars	1863
1217	Clinton, W. E., & Co	Janesville, Rock County	Book Binders	1895
1218	Ford Milling Co	Janesville, Rock County	Mfrs. of Flour	1880
1219	Globe Work Co	Janesville, Rock Co	Mfrs. Engines, Pumps, Etc	1888
1220	Gazette Printing Co	Janesville, Rock County	Publishing	1845
1221	Green & Daily	Janesville, Rock County	Mfrs. Sash, Doors and Blinds	1879
1222	Hall Furniture Co	Janesville, Rock County	Mfrs. Furniture	1891
1223	Hanson Furniture Co	Janesville, Rock County	Mfrs. of Furniture	1890
1224	Janesville Barb Wire Co	Janesville, Rock County	Mfrs. of Barb Wire and Nails	1882
1225	Janesville Carriage Works	Janesville, Rock County	Mfrs. of Carriages	1893
1226	Janesville Clothing Co	Janesville, Rock County	Mfrs. of Clothing	1883
1227	Janesville Cotton Mills	Janesville, Rock County	Mfrs. of Sheeting	1874
1228	Janesville Electric Company	Janesville, Rock County	Electric Light and Power	1895
1229	Janesville Hay Tool Company	Janesville, Rock County	Mfrs. of Haying Machinery	1885
1230	Janesville Machine Co	Janesville, Rock County	Mfrs. of Agricultural Implements	1868
1231	Janesville Planing Mill	Janesville, Rock County	Mfrs. All Kinds of Wood Work	1897
1232	Lewis Knitting Works	Janesville, Rock County	Knit Goods	1871
1233	Marzluff, F. M., & Co	Janesville, Rock County	Mfrs. Ladies' Fine Shoes	1885
1234	New Doty Mfr. Co	Janesville, Rock County	Mfrs. of Iron Working Machinery	1867
1235	New Gas Light Company	Janesville, Rock County	Mfrs. of Gas	1856
1236	Recorder Printing Co	Janesville, Rock County	Printing and Publishing	1871
1237	Republican Printing Co	Janesville, Rock County	Printers and Publishers	1890
1238	Richardson & Norcross	Janesville, Rock County	Mfrs. of Fine Shoes	1893
1239	Riverside Steam Laundry	Janesville, Rock County	Laundry	1891
1240	Rock River Cotton Co	Janesville, Rock County	Mfrs. Cotton Batting, Twine, Etc	1874
1241	Shackleton, J. M.	Janesville, Rock County	Mfrs. of Flour	1894
1242	Soulman, John	Janesville, Rock County	Mfrs. of Cigars	1889
1243	Taylor, M. D., & Morris	Janesville, Rock County	Machinery, Wood Workers	1890
1244	Thoroughgood & Co	Janesville, Rock County	Mfrs. Cigar Boxes	1874
1245	The Troy Steam Laundry	Janesville, Rock County	Laundry	1897

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1246	Wisconsin Carriage Top Co	Janesville, Rock County	Mfrs. of Carriage and Carriage Tops	1897
1247	Wisconsin Paper Box Co	Janesville, Rock County	Mfrs. of Paper Boxes	1897
1248	Woodruff, H. S., & Co	Janesville, Rock County	Mfrs. of Trace Buckles	1890
1249	Ambrose, F. O	Jefferson, Jefferson County	Mfrs. Engines, Boilers and Tanks	1890
1250	City Brewery	Jefferson, Jefferson County	Brewers and Maisters	1873
1251	The Copeland & Ryder Co	Jefferson, Jefferson County	Mfrs. Boots and Shoes	1868
1252	Fernholtz & Waterberry	Jefferson, Jefferson County	Mfrs. Sash, Doors, Blinds and Mouldings.	1893
1253	Gannon & Johnson	Jefferson, Jefferson County	Mfrs. Flour and Feed	1850
1254	Hemel, John G	Jefferson, Jefferson County	Mfrs. Leather	1865
1255	Jefferson Banner	Jefferson, Jefferson County	Publishing and Printing	1860
1256	Jefferson Brewing & Malting	Jefferson, Jefferson County	Brewers	1895
1257	Jefferson Brick & Tile Co	Jefferson, Jefferson County	Mfr. Brick and Tile	1886
1258	Jefferson Co. Union & Hoard's Dairyman.	Jefferson, Jefferson County	Publishing and Printing	1870
1259	Jefferson Electric Light Co	Jefferson, Jefferson County	Lighting City	1893
1260	Jefferson Printing Co	Jefferson, Jefferson County	Publishing and Printing	1895
1261	Jefferson Woolen Mills	Jefferson, Jefferson County	Mfrs. Blankets and Woolen Cloth	1870
1262	Kemmeter Bros	Jefferson, Jefferson County	Mfrg. Brick	1875
1263	Lentz, Chas	Jefferson, Jefferson County	Mfr. Cigars	1882
1264	Lytle-Stoppenbach Co., The	Jefferson, Jefferson County	Elevator and Feed Mill	1872
1265	Metzen, M. C., & Son	Jefferson, Jefferson County	Stone and Marble Works	1880
1266	Stoppenbach, C., & Sons	Jefferson, Jefferson County	Meat Packers and Wholesale Dealers	1882
1267	Troeger & Company, George	Jefferson, Jefferson County	Farmers Horse Collars and Fly Nets	1874
1268	The Lytle-Stoppenbach Company	Jefferson, Jefferson County	Grain Elevator and Maisters	1891
1269	Vaugh Mfg. Company	Jefferson, Jefferson County	Mfrs. Agricultural Implements	1877
1270	Wisconsin Mfg. Co	Jefferson, Jefferson County	Mfrs. Chairs	1857
1271	Brokaw Pulp Co	Kaukauna, Outagamie Co	Ground Wood Pulp	1885
1272	C. & N. W. Ry. Repair Shop	Kaukauna, Outagamie Co	Repairing Locomotive and Cars	1883
1273	Fox River Pulp Co	Kaukauna, Outagamie Co	Wood Pulp	1882
1274	Hoene & Langworth	Kaukauna, Outagamie Co	Machine Repair Shop	1892
1275	Kaukauna Elec. Light Co	Kaukauna, Outagamie Co	Electric Light	1892
1276	Kaukauna Fibre Co	Kaukauna, Outagamie Co	Sulphite Pulp	1889
1277	Kaukauna Lumber Co	Kaukauna, Outagamie Co	Planing Mill	1881

1278	Kaukauna Machine Co.	Kaukauna, Outagamie Co.	Paper Mill Machinery	1890
1279	Kaukauna Steam Laundry	Kaukauna, Outagamie Co.	Laundry	1894
1280	Kaukauna Times, The	Kaukauna, Outagamie Co.	Printing and Publishing	1880
1281	Outagamie Paper Co.	Kaukauna, Outagamie Co.	Paper and Wood Pulp	1883
1282	Reese Pulp Co.	Kaukauna, Outagamie Co.	Wood Pulp	1888
1283	Solar Mfg. Co., The	Kaukauna, Outagamie Co.	Dustless Fanning Mills	1892
1284	Thilmany Pulp & Paper Mill	Kaukauna, Outagamie Co.	Paper and Pulp	1889
1285	Victoria Mills	Kaukauna, Outagamie Co.	Flour and Feed	1880
1286	Western Paper Bag Co.	Kaukauna, Outagamie Co.	Paper and Wood Pulp	1883
1287	Green Bay Agency	Keshena, Shawano Co.	Lumber and Flour	1885
1288	Allen's, N. R., Sons	Kenosha, Kenosha Co.	Tanners	1856
1289	Bain Wagon Co., The Lmt.	Kenosha, Kenosha Co.	Wagons	1852
1290	Chicago Brass Co.	Kenosha, Kenosha Co.	Rolled Brass	1887
1291	Chicago, Rockford Hosiery Co.	Kenosha, Kenosha Co.	Hosiery	1893
1292	Fidelity Steam Laundry	Kenosha, Kenosha Co.	Laundry	1894
1293	Grant, C., Mrs.	Kenosha, Kenosha Co.	Sash, Doors and Blinds	1878
1294	Head, E. R.	Kenosha, Kenosha Co.	Publishing and Printing	1839
1295	Kenosha Crib Co., The	Kenosha, Kenosha Co.	Woven Wire Cribs, Cots, Cradles, etc.	1883
1296	Kenosha Daily Gazette, The	Kenosha, Kenosha Co.	Printing and Publishing	1890
1297	Kenosha Daily Union, The	Kenosha, Kenosha Co.	Printing and Publishing	1865
1298	Kenosha Steam Laundry	Kenosha, Kenosha Co.	Laundry	1889
1299	Northwestern Wire Mattress Co.	Kenosha, Kenosha Co.	Wire Mattresses	1890
1300	O'Donnell, John	Kenosha, Kenosha Co.	Wood and Coal	1886
1301	Petit, H. M., Malting Co.	Kenosha, Kenosha Co.	Malt	1887
1302	Pirsch, Nichoas	Kenosha, Kenosha Co.	Wagons	1863
1303	Sterling Cycle Co.	Kenosha, Kenosha Co.	Bicycles	1895
1304	Sieg, Chas. H., Mfg. Co.	Kenosha, Kenosha Co.	Bicycles	1895
1305	Wells & Messler	Kenosha, Kenosha Co.	Founders and Machinists	1893
1306	Whitaker, R. B.	Kenosha, Kenosha Co.	Founders and Machinists	1865
1307	Windsor Spring Co., The	Kenosha, Kenosha Co.	Spring Beds	1894
1308	Bargmann, John M.	Kewaunee, Kewaunee Co.	Sash, Doors and Blinds	1882
1309	Hamachek, Frank	Kewaunee, Kewaunee Co.	Agricultural Imp. and Machinery	1855
1310	Kewaunee Enterprise Printing Co.	Kewaunee, Kewaunee Co.	Publishing and Printing	1859
1311	Kewaunee Iron Works	Kewaunee, Kewaunee Co.	Machinists	1894
1312	Kewaunee Milling Co.	Kewaunee, Kewaunee Co.	Flour	1870
1313	Kewaunee Printing Co.	Kewaunee, Kewaunee Co.	Publishers and Printers	1885
1314	Kewaunee Listy	Kewaunee, Kewaunee Co.	Publishers and Printers	1892
1315	Mauger, E. C., & Son	Kewaunee, Kewaunee Co.	Coffins and Planing Mill	1896

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1316	Werninger & Wittke	Kewaunee, Kewaunee Co.	Canning Peas and Mfg. Butter	1896
1317	Ziemer, Aug., & Co.	Kewaunee, Kewaunee Co.	Iron Castings	1896
1318	Kiel Mfg. Co.	Kiel, Calumet Co.	Tables	1892
1319	Kiel Wooden Ware Co.	Kiel, Calumet Co.	Cheese Boxes, Butter Pails, etc.	1884
1320	Marshall Machine Co.	Kilbourn, Columbia Co.	Windmills and Sawing Machines	1880
1321	Kimball & Clark	Kimball, Iron Co.	Pine and Hard Wood Lumber	1889
1322	Kimberly & Clark	Kimberly, Outagamie Co.	Sulphate and Ground Wood Pulp	....
1323	Douglass, H. L.	Lake Mills, Jefferson Co.	Flour and Feed	1845
1324	Fargo, F. B., & Co.	Lake Mills, Jefferson Co.	Creamery Machinery	1870
1325	Lake Mills Leader, The	Lake Mills, Jefferson Co.	Publishing and Printing	1880
1326	Seavers, F. A.	Lake Mills, Jefferson Co.	Oil Tempered Knives and Cleavers	1873
1327	Lehigh Lumber Co.	Lehigh, Barron Co.	Lumber	1890
1328	Netzer, N. C., & Scheeg	Lena, Oconto Co.	Flour	1895
1329	De Long, R. M.	Leon, Monroe Co.	Flour and Feed	1856
1330	Little Chute Pulp Co.	Little Chute, Outagamie	Ground Wood Pulp	1893
1331	Aiken Gleason Co., The	La Crosse, La Crosse Co.	Photographic Supplies	1896
1332	Anderson Mons Co., The	La Crosse, La Crosse Co.	Overalls, Shirts and Pants	1875
1333	Benton & McDonald	La Crosse, La Crosse Co.	Electrical Machinery	....
1334	Boycott, Walter	La Crosse, La Crosse Co.	Printing and Binding	1879
1335	Cargill, W. W.	La Crosse, La Crosse Co.	Grain Elevator	1880
1336	Chicago, Burlington & N. Ry.	La Crosse, La Crosse Co.	Repairing Cars	1886
1337	C., M. & St. Paul Round House	La Crosse, La Crosse Co.	Repairing Cars	1858
1338	Colman, C. L.	La Crosse, La Crosse Co.	Lumber, Lath and Shingles	1858
1339	Davis, Medary & Platz Co.	La Crosse, La Crosse Co.	Harness Leather	1877
1340	Davis, Sorenson & Co.	La Crosse, La Crosse Co.	Contractors and Builders	1887
1341	Dengler, John	La Crosse, La Crosse Co.	Cigars	1884
1342	De Soto Lumber Co.	La Crosse, La Crosse Co.	Lumber	1893
1343	Doud Sons & Co.	La Crosse, La Crosse Co.	Flour Barrels	1870

1344	Eagle Brewery	La Crosse, La Crosse Co	Lager Beer	1885
1345	Eureka Chemical & Mfg. Co	La Crosse, La Crosse Co	Chemicals	1892
1346	Franklin Iron Works	La Crosse, La Crosse Co	Machinists and Founders	1875
1347	Funke, Jos. B	La Crosse, La Crosse Co	Confectionery	1880
1348	Funk, M., Boilers Wks. Co	La Crosse, La Crosse Co	Boilers	1865
1349	Gateway City Laundry	La Crosse, La Crosse Co	Laundry	1892
1350	Gateway City Lumber Co	La Crosse, La Crosse Co	Lumber	1884
1351	Goddard, H	La Crosse, La Crosse Co	Lumber	1867
1352	Gund, John, Brewing Co., The	La Crosse, La Crosse Co	Lager Beer	1873
1353	Hackner, E	La Crosse, La Crosse Co	Church Furniture, etc	1881
1354	Haerter, N	La Crosse, La Crosse Co	Blank Books	1882
1355	Heileman, G., Brewing Co	La Crosse, La Crosse Co	Lager Beer	1857
1356	Holway, N. B., Estate	La Crosse, La Crosse Co	Lumber, Lath and Shingles	1857
1357	Hyde, S. Y., Elevator Co., El. A	La Crosse, La Crosse Co	Grain Elevator	1870
1358	James, John & Co	La Crosse, La Crosse Co	Founders and Machinists	1874
1359	Kratchwil, M	La Crosse, La Crosse Co	Confectionery	1892
1360	Kuhn, R. C., & Co	La Crosse, La Crosse Co	Sash, Doors and Blinds	1895
1361	La Crosse Box Co	La Crosse, La Crosse Co	Boxes	1889
1362	La Crosse Boot & Shoe Co	La Crosse, La Crosse Co	Boots and Shoes	1889
1363	La Crosse Brush & Elec. Lgt. & P. Co	La Crosse, La Crosse Co	Light for City	1881
1364	La Crosse City Ry. Co	La Crosse, La Crosse Co	Street Railway	1893
1365	La Crosse City Water Works	La Crosse, La Crosse Co	Supplying Water	1877
1366	La Crosse Coffee & Spice Mill	La Crosse, La Crosse Co	Baking Powder, etc	1893
1367	La Crosse Cracker & Candy Co	La Crosse, La Crosse Co	Candy and Crackers	1884
1368	La Crosse Edison Lgt. & Power Co	La Crosse, La Crosse Co	Light and Power	1887
1369	La Crosse Foundry & Machine Shop	La Crosse, La Crosse Co	Furnaces, etc.	1876
1370	La Crosse Gas Co	La Crosse, La Crosse Co	Gas for City	1863
1371	La Crosse Knitting Co	La Crosse, La Crosse Co	Hosiery and Mittens	1886
1372	La Crosse Linseed Oil Co	La Crosse, La Crosse Co	Linseed Oil and Oil Cakes	1884
1373	La Crosse Lumber Co	La Crosse, La Crosse Co	Lumber	1871
1374	La Crosse Paper Box Co	La Crosse, La Crosse Co	Paper Boxes	1892
1375	La Crosse Plow Works	La Crosse, La Crosse Co	Agricultural Implements	1865
1376	La Crosse Printing & Pub. Co	La Crosse, La Crosse Co	Newspaper and Job Printing	1857
1377	La Crosse Soap Co	La Crosse, La Crosse Co	Soap	1858
1378	La Crosse Soda Water Factory	La Crosse, La Crosse Co	Soda Water	1892
1379	La Crosse Steam Laundry	La Crosse, La Crosse Co	Laundry	1884
1380	La Crosse Steel Roofing & Corrugating Co.	La Crosse, La Crosse Co	Steel Roofing, etc	1896
1381	La Crosse Tidende	La Crosse, La Crosse Co	Printing and Publishing	1895
1382	La Crosse Vinegar & Pickling Co	La Crosse, La Crosse Co	Vinegar and Pickles	1893

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1383	La Crosse Wallis Carriage Co.	La Crosse, La Crosse Co.	Carriages and Sleighs	1885
1384	Listman Mill Co.	La Crosse, La Crosse Co.	Flour	1879
1385	Medary, J. S., Saddlery Co.	La Crosse, La Crosse Co.	Saddles, Collars and Fly Nets	1860
1386	Michel, C. J., Brewing Co.	La Crosse, La Crosse Co.	Lager Beer	1857
1387	Miller, August	La Crosse, La Crosse Co.	Brooms	1881
1388	Nordstern Association	La Crosse, La Crosse Co.	Printing and Publishing	1856
1389	North La Crosse Brewing Co.	La Crosse, La Crosse Co.	Lager Beer	1885
1390	Novelty Wood Work	La Crosse, La Crosse Co.	Sash, Doors and Blinds	1883
1391	Pamperin & Wiggenhorn Co.	La Crosse, La Crosse Co.	Cigars	1866
1392	Paul John Lumber Co.	La Crosse, La Crosse Co.	Lumber	1860
1393	Phoenix Mfg. Co.	La Crosse, La Crosse Co.	Cigar Boxes	1896
1394	Press Publishing Co., The	La Crosse, La Crosse Co.	Publishers and Printers	1879
1395	Salzer, John A., Co.	La Crosse, La Crosse Co.	Seed Grower	1879
1396	Sawyer & Austin Lbr. Co.	La Crosse, La Crosse Co.	Saw Mill and Lbr. Yard	1884
1397	Segelke & Kohlhaus Mfg. Co.	La Crosse, La Crosse Co.	Sash, Doors and Blinds	1862
1398	Smith Mfg. Co.	La Crosse, La Crosse Co.	Wagons	1861
1399	Solberg, Wm. J.	La Crosse, La Crosse Co.	Boilers	1886
1400	Spicer & Buschman	La Crosse, La Crosse Co.	Job Printers	1886
1401	Star Knitting Co.	La Crosse, La Crosse Co.	Mittens and Gloves	1888
1402	Star Steam Laundry	La Crosse, La Crosse Co.	Laundry	1884
1403	Trow, A. S., & Co.	La Crosse, La Crosse Co.	Lumber, Lath and Shingles	1865
1404	Volksfreund Pub. Co.	La Crosse, La Crosse Co.	Printers and Publishers	1891
1405	West Wisconsin Iron Works	La Crosse, La Crosse Co.	Mill Machinery	1879
1406	Wheel & Seeder Mfg. Co.	La Crosse, La Crosse Co.	Agricultural Implements	1868
1407	Yeo & Clark	La Crosse, La Crosse Co.	Flour and Feed	1880
1408	Flambeau Lumber Co.	Lac Du Flambeau, Vilas Co.	Lumber, Lath and Shingles	......
1409	Flambeau Lumber Co.	Lac Du Flambeau, Vilas Co.	Lumber, Lath and Shingles	....
1410	Graves, A. A.	Loyal, Clark Co.	Lumber	1885
1411	Loyal Tribune, The	Loyal, Clark Co.	Publishing and Printing	1894
1412	Ruplinger Stave and Heading Co.	Loyal, Clark Co.	Staves, Heading and Lumber	1891
1413	Alford Bros. Steam Laundry	Madison	Steam Laundry	1884
1414	Amerika Pub. Company, The	Madison	Publishers and Printers	1896

1415	Baus, Ambrecht & Wagner	Madison	Manufacturers Cigars	1889
1416	Breckheimer's Brewery	Madison	Brewers	1865
1417	Campbell, Alex. S.	Madison	Merchant Millers	1897
1418	Cantwell, M. J.	Madison	Publishers of Standard Law Blanks	1867
1419	Capital City Mills, Dow & Sons	Madison	Merchant Millers	1888
1420	Chicago, Milwaukee & St. Paul Ry	Madison	Round House and Repair Shops	1857
1421	Chicago & Northwestern Ry	Madison	Round House and Repair Shops	1885
1422	Democrat Printing Company	Madison	Printers and Pub. of Daily and Weekly	1867
1423	Curtis, Dexter	Madison	Zinc Lined Boss Collar Pad	1870
1424	Fauerbach Brewing Co.	Madison	Mfr. of Beer	1847
1425	F. F. F. Steam Laundry	Madison	Steam Laundry	1880
1426	Frederickson & Sons	Madison	Sash, Doors and Blinds	1858
1427	Fuller & Johnson	Madison	Agricultural Implements	1840
1428	Gisholt Machine Company	Madison	Mfrs. Machine Tools	1889
1429	Grove, H., & Son	Madison	Mfrs. Cigars	1859
1430	Hart Parr Company, The	Madison	Internal Combustion Engines	1897
1431	Hausmann Brewing Co.	Madison	Mfrs. of Beer	1863
1432	Johnson, Harry	Madison	Contractor and Builder	1897
1433	King & Walker	Madison	Foundry Machine Works	1894
1434	Ledwith, James	Madison	Mfrs. Buggies, Sleighs and Phaetons	1863
1435	Madison Book Bindery	Madison	General Book Binders	1874
1436	Madison City Water Works	Madison	Supply Water City Use	1882
1437	Madison Gas & Electric Company	Madison	Supply Gas and Electric Light	1896
1438	Madison Saddlery Company	Madison	Mfrs. of Harness	1888
1439	Maier & Bros	Madison	Boots and Shoes	1879
1440	Northern Electrical Company	Madison	Mfr. Dynamos, Motors, Etc.	1895
1441	Old Dane Printing Company	Madison	Publishers and Printers	1897
1442	Schmidt, Aug., & Company	Madison	Mfrs. Carriages and Sleighs	.....
1443	Silbernagel, J. J.	Madison	Mfrs. Sash, Doors and Blinds	1882
1444	Standard Telephone & Electric Co.	Madison	Mfrs. Telephones	1895
1445	Stark Mfr. Company, The	Madison	Mfrs. Sash, Doors and Blinds	1856
1446	State Journal Printing Co.	Madison	Printing, Publishing and Stereotyping	1837
1447	Schilmgen & Son	Madison	Mfrs. of Monuments	1882
1448	Swenson, J. H.	Madison	Mfrs. Sash and Doors	1888
1449	Taylor & Gleason	Madison	Printers and Publishers	1892
1450	Teckemeyer Candy Company	Madison	Mfr. Confectionery	1888
1451	Tracy, Gibbs & Company	Madison	Publishers and Printers	1889
1452	J. S. Vetter	Madison	Contractors and Builders	1891

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1453	F. D. Winklery	Madison	Mfr. Dust Proof Oil Hole Covers	1892
1454	Wisconsin Wagon Company	Madison	Mfrs. Carriages, Ice Wagons and Drays.	1883
1455	Advocate, The	Manawa, Waupaca Co	Publishing and Printing	1895
1456	Nelson Esche Milling Co	Manawa, Waupaca Co	Flour	1889
1457	Little Wolf River Lumber Co	Manawa, Waupaca Co	Lumber, Lath and Shingles	1892
1458	Biegel & Guse	Manitowoc, Manitowoc Co	Planing Mill	1888
1459	Brand Printing & Binding Co	Manitowoc, Manitowoc Co	Job Printing and Book Binding	1891
1460	Burger, H. B. & G. B	Manitowoc, Manitowoc Co	Ship Building and Repairing	1875
1461	Doffert, Chas	Manitowoc, Manitowoc Co	Leather	1865
1462	Dorst, H., & Son	Manitowoc, Manitowoc Co	Cigar and Paper Boxes	1877
1463	Hyroth, F	Manitowoc, Manitowoc Co	Pearl Buttons	1890
1464	Kiel & Gehrke	Manitowoc, Manitowoc Co	Sash, Doors, Blinds, and Planing Mill	1897
1465	Kuntz Bieser & Co	Manitowoc, Manitowoc Co	Beer	1879
1466	Landreth, A. Seed Co., The	Manitowoc, Manitowoc Co	Canning Peas	1890
1467	Manitowoc Building Supply Co	Manitowoc, Manitowoc Co	Doors, Blinds and Planing	1896
1468	Manitowoc Coal & Dock Co	Manitowoc, Manitowoc Co	Coal Dealers	1886
1469	Manitowoc Electric Light Co	Manitowoc, Manitowoc Co	Electric Light and Power	1890
1470	Manitowoc Glue Co	Manitowoc, Manitowoc Co	Glue	1868
1471	Manitowoc Land Plaster Works	Manitowoc, Manitowoc Co	Land Plaster	1877
1472	Manitowoc Pilot, The	Manitowoc, Manitowoc Co	Publishing and Printing	1859
1473	Manitowoc Seating Co., The	Manitowoc, Manitowoc Co	School and Church Furniture	1892
1474	Manitowoc Steam Boiler Works	Manitowoc, Manitowoc Co	Boilers and Smoke Stacks	1890
1475	Oriental Mills	Manitowoc, Manitowoc Co	Milling	1868
1476	Palace Steam Laundry	Manitowoc, Manitowoc Co	Laundry	1897
1477	Prochatzka & Chlonpek	Manitowoc, Manitowoc Co	Machinery	1867
1478	Richards Iron Works	Manitowoc, Manitowoc Co	Engines, Pumps and Machinery	1868
1479	Richter, A. M., & Son	Manitowoc, Manitowoc Co	Vinegar	1875
1480	Rohr, Wm. Sons Co., The	Manitowoc, Manitowoc Co	Beer and Malt	1848
1481	Schierhardt Brewing Co	Manitowoc, Manitowoc Co	Beer and Malt	1865
1482	Schnorr Bros	Manitowoc, Manitowoc Co	Leather	187[illegible]
1483	Smalley Mfg. Co	Manitowoc, Manitowoc Co	Agricultural Implements	1887
1484	Snow Flake Laundry	Manitowoc, Manitowoc Co	Laundry	1893

1485	Vits, Henry	Manitowoc, Manitowoc Co.	Leather	1864
1486	Wagner, E.	Manitowoc, Manitowoc Co.	Tinware, etc.	1882
1487	Willott, J. W., & Sons	Manitowoc, Manitowoc Co.	Axes and Feed Cutting Knives	1871
1488	Deprato, Phillip	Marathon, Marathon Co.	Lumber	1891
1489	Hamann, Edward	Marathon, Marathon Co.	Lumber	1888
1490	Hermann, Edward	Marathon, Marathon Co.	Flour	1890
1491	Lewis, John	Marathon, Marathon Co.	Lumber	1888
1492	Schilling & Lemmer	Marathon, Marathon Co.	Hoops and Staves	1897
1493	Stubefauth, Geo., Bros	Marathon, Marathon Co.	Beer	1885
1494	Volmn & Graube	Marathon, Marathon Co.	Planing Mill	1892
1495	Declint & Prescott	Marinette, Oconto Co.	Engine and Saw Mill Machinery	1870
1496	Eagle Printing Co.	Marinette Oconto Co.	Publishing and Printing	1874
1497	Hamilton & Merryman Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1873
1498	Hoppert, H. D.	Marinette, Oconto Co.	Shingles	1893
1499	Lieber & Noel Mfg. Co.	Marinette, Oconto Co.	Shingles	1893
1500	Linden & Miller	Marinette, Oconto Co.	Building Material, Sash, etc.	1884
1501	Ludington, N., Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1855
1502	Marinette Co. Argus, The	Marinette, Oconto Co.	Publishing and Printing	1887
1503	Marinette Flour Mill Co.	Marinette, Oconto Co.	Milling	1879
1504	Marinette Gas Light & St. Ry. Co.	Marinette, Oconto Co.	Electric Light and Power	1890
1505	Marinette Lumber Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1892
1506	Marinette & Menomonee Box Co.	Marinette, Oconto Co.	Packing Boxes	1890
1507	Marinette & Menomonee Paper Co., No. 1.	Marinette, Oconto Co.	Ground Wood and Sulphate Pulp	1880
1508	Marinette & Menomonee Paper Co., No. 2.	Marinette, Oconto Co.	Ground Wood and Sulphate Pulp	1892
1509	Marinette Planing Mill Co.	Marinette, Oconto Co.	Sash, Doors and Mouldings	1873
1510	Menomonee River Lumber Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1857
1511	Merryman, R. W., & Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1878
1512	North Star, The	Marinette, Oconto Co.	Publishing and Printing	1896
1513	Parisian Steam Laundry	Marinette, Oconto Co.	Laundry	1889
1514	Sawyer & Goodman Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1879
1515	Scofield & Arnold Lumber Co.	Marinette, Oconto Co.	Lumber, Lath and Shingles	1874
1516	Stephenson Mfg. Co., The	Marinette Oconto Co.	Lumber, Lath and Shingles	1888
1517	Twin City Lumberman, The	Marinette, Oconto Co.	Publishing and Printing	1895
1518	Union Steam Laundry	Marinette, Oconto Co.	Laundry	1895
1519	Whitbeck, H., & Co., The	Marinette, Oconto Co.	Lumber, Lath and Shingles	1868
1520	Goldthwait, Moses C.	Marion, Shawano Co.	Flour	1882
1521	Grosskopf, Bros.	Marion, Shawano Co.	Saw Mill and Shingles	1889
1522	Madson, John	Marion, Shawano Co.	Lumber	1887
1523	Marion Furniture Co.	Marion, Shawano Co.	Furniture	1893
1524	Maul, Frank	Marion, Shawano Co.	Saw Mill	1887

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1525	Rogers & Johnson	Marshfield, Wood Co	Excelsior	1894
1526	Billie, Hans	Marshfield, Wood Co	Contractor, Builder and Wood Work	1892
1527	Hafer & Kalsched	Marshfield, Wood Co	Pine and Hard Wood Lumber	1887
1528	Hoelz, John G.	Marshfield, Wood Co	Cigars	1885
1529	Lister & Rasmussen	Marshfield, Wood Co	Flour and Feed	1896
1530	Marshfield Bedding Co., The	Marshfied, Wood Co	Spring Bed, Mattresses, etc	1894
1531	Marshfield Brewing Co	Marshfield, Wood Co	Beer	1890
1532	Marshfield Chair Mfg. Co	Marshfield, Wood Co	Chairs	1898
1533	Marshfield Iron Works	Marshfield, Wood Co	Machinists and Founders	1882
1534	Marshfield Stave Co	Marshfield, Wood Co	Staves	1882
1535	Marshfield Water Elec. & Power Co	Marshfield, Wood Co	Light and Water	....
1536	Metelke Bros	Marshfield, Wood Co	Mfg. Bicycles and Dealers	1897
1537	Roddis Veneer Co	Marshfield, Wood Co	Veneer Panels and Cheese Boxes	1891
1538	Upham Mfg. Co	Marshfield, Wood Co	Power House	1889
1539	Upham Mfg. Co	Marshfield, Wood Co	Planing Mill	1878
1540	Upham Mfg. Co	Marshfield, Wood Co	Flour and Feed	1888
1541	Upham Mfg. Co	Marshfield, Wood Co	Lumber, Lath and Shingles	1877
1542	Upham Mfg. Co., The	Marshfield, Wood Co	Furniture	1878
1543	Wisconsin Hoop Co	Marshfield, Wood Co	Hoops	1896
1544	Arcadia Mills	Mazomanie	Flour and Feed	1857
1545	Mazomanie Brewing Co	Mazomanie	Beer	1878
1546	Mazomanie Cabinet Co	Mazomanie	Furniture	1894
1547	Mazomanie Power House	Mazomanie	Light	1893
1548	White River Lumber Co	Mason, Bayfied Co	Lumber, Lath and Shingles	1883
1549	Antigo Mfg. Co	Mattoon, Shawano Co	Staves and Heading	1894
1550	Mattoon Mfg. Co	Mattoon, Shawano Co	Veneering	1896
1551	Mattoon Mfg. Co	Mattoon, Shawano Co	Lumber	1887
1552	Mattoon Mfg. Co	Mattoon, Shawano Co	Furniture Material	1890
1553	Wis. Lumber & Land Co	Mattoon, Shawano Co	Lumber, Lath and Veneer	1898
1554	Mauston Milling Co	Mauston, Juneau Co	Flour and Feed	1881
1555	American Bottle Cover Mfg. Co	Mayville, Dodge Co	Hay and Straw Bottle Covers	1895

1556	Buerger Malting Co	Mayville, Dodge Co	Malt	1894
1557	Hollenstein, John	Mayville, Dodge Co	Wagons, Carriages and Sleighs	1875
1558	Northwestern Iron Co	Mayville, Dodge Co	Iron Works	1847
1559	German Publishing Co., The	Medford, Taylor Co	Publishers and Printers	1883
1560	Medford Mfg. Co	Medford, Taylor Co	Lumber and Excelsior	1896
1561	Medford Sentinel, The	Medford, Taylor Co	Publishers and Printers	1895
1562	Medford Star & News	Medford, Taylor Co	Publishers and Printers	1875
1563	Pollard, O. D	Medford, Taylor Co	Saw and Planing Mill	1894
1564	Shaw, T. F. M. and F. D., & Co	Medford, Taylor Co	Non-Acid Hemlock Sole Leather	1889
1565	McClellan, J. R	Medina, Outagamie Co	Saw Mill, Cheese Boxes, etc	1884
1566	Ruppie, J	Medina, Outagamie Co	Cheese Boxes	1886
1567	Wisconsin Butter & Cheese Co	Medina, Outagamie Co	Butter and Cheese	1893
1568	Shaw, Fayette & Co	Mellen, Ashland Co	Sole Leather	1896
1569	Cook, L. A	Menasha, Winnebago Co	Paper	1893
1570	Gilbert Paper Co	Menasha, Winnebago Co	Envelope Paper	1887
1571	Hanke, Louis	Menasha, Winnebago Co	Brick	1883
1572	Howard Paper Co	Menasha, Winnebago Co	Book and Print Paper	1888
1573	McKinnan, D. T. H	Menasha, Winnebago Co	Split Pulleys and Machinists	1893
1574	McKinnan Excelsior Co	Menasha, Winnebago Co	Excelsior	1880
1575	Menasha Boat Co	Menasha, Winnebago Co	Row and Sail Boats	1892
1576	Menasha Evening Breeze	Menasha, Winnebago Co	Publishing and Printing	....
1577	Menasha Iron Works	Menasha, Winnebago Co	General Machinists	1875
1578	Menasha Press	Menasha, Winnebago Co	Publishing and Printing	1862
1579	Menasha Wood Split Pulley Co	Menasha, Winnebago Co	Wood and Split Pulleys	1888
1580	Menasha Woodenware Co	Menasha, Winnebago Co	Wash Tubs, Pails, Barrels, etc	1856
1581	Menasha Woolen Mills	Menasha, Winnebago Co	Woolen Goods	1867
1582	Schneider, John	Menasha, Winnebago Co	Planing Mill	1872
1583	Strange, J., Paper Co	Menasha, Winnebago Co	Manilla, Express and Book Paper	1881
1584	Walter Bros. Brewing Co	Menasha, Winnebago Co	Beer and Malt	1888
1585	Whiting, George H	Menasha, Winnebago Co	Print and Book Paper	1882
1586	Winnebago Anzeiger	Menasha, Winnebago Co	Publishing and Printing	1880
1587	Anderson Bros	Menomonie, Dunn Co	Cigars	1893
1588	Dunn Co. News, The	Menomonie, Dunn Co	Publishing and Printing	1860
1589	Ebert, T. R., & Co	Menomonie, Dunn Co	Sash and Doors	1895
1590	Knapp, Stout & Co. Company	Menomonie, Dunn Co	Lumber, Lath and Shingles	1846
1591	Menomonie Iron Works	Menomonie, Dunn Co	Foundry and Machine Shop	1894
1592	Menomonie Nordstern	Menomonie, Dunn Co	Publishing and Printing	1887
1593	Menomonie Pressed Brick Co	Menomonie, Dunn Co	Pressed Brick	1882
1594	Menomonie Times	Menomonie, Dunn Co	Publishing and Printing	1877

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1595	Standard Pressed Brick Co	Menomonie, Dunn Co	Brick	1892
1596	S. and T. Laundry, The	Menomonie, Dunn Co	Laundry	1897
1597	Wisconsin Red Pressed Brick Co	Menomonie, Dunn Co	Brick	1872
1598	Johnson, C. N	Merrill, Lincoln Co	Publishers and Printers	1874
1599	Gilkey & Anson Lumber Co	Merrill, Lincoln Co	Lumber, Lath and Shingles	1883
1600	Lerdiger Brewing Co	Merrill, Lincoln Co	Beer	1896
1601	Merrill Electric Laundry	Merrill, Lincoln Co	Laundry	1888
1602	Merrill Iron Works	Merrill, Lincoln Co	Founders and Machinists	1880
1603	Merrill Lumber Co	Merrill, Lincoln Co	Lumber, Lath and Shingles	1886
1604	Perley & Lowe	Merrill, Lincoln Co	Lumber, Lath and Shingles	....
1605	Scott, T. B., Lumber Co	Merrill, Lincoln Co	Lumber, Lath and Shingles	1881
1606	Spiegelberg, C. F	Merrill, Lincoln Co	Flour and Feed	1878
1607	Strange, A. H., Co	Merrill, Lincoln Co	Lumber, Lath and Shingles	1885
1608	Tedd, Wm., Co	Merrill, Lincoln Co	Tannery	1895
1609	Wright, H. W., Lumber Co	Merrill, Lincoln Co	Lumber, Lath and Shingles	1881
1610	Gile, H. R	Merrillan, Jackson Co	Publishing and Printing	1877
1611	Merrill, A. D	Merrillan, Jackson Co	Lumber, Lath and Shingles	1895
1612	Trow, A. S	Merrillan, Jackson Co	Lumber, Lath and Shingles	1875
1613	Banner Creamery	Milton Junction, Rock Co	Butter	1894
1614	Swaney, John W	Milton Junction, Rock Co	Cigars	1884
1615	West, Wm. B	Milton Junction, Rock Co	Grist Mill and Resawing	1887
1616	Kelley Co	Mineral Point, Iowa Co	Asbestos Goods	1893
1617	Martin, John C	Mineral Point, Iowa Co	Grist Mill	1896
1618	Mineral Point Electric Light Co	Mineral Point, Iowa Co	Electric Light	1897
1619	Mineral Point Laundry	Mineral Point, Iowa Co	Laundry	1894
1620	Mineral Point Linen & Fibre Co	Mineral Point, Iowa Co	Paper and Soda Fibre	1893
1621	Mineral Point Tribune	Mineral Point, Iowa Co	Publishing and Printing	1845
1622	Mineral Point Woolen Mfg. Co	Mineral Point, Iowa Co	Blankets	1891
1623	Mineral Point Zinc Works	Mineral Point, Iowa Co	Oxide Zinc	1882
1624	Tornado Brewery	Mineral Point, Iowa Co	Beer	1850
1625	Blumer Bottling Works	Monroe, Green Co	Bottling Beer	1897
1626	Brodhead Roller Mills	Monroe, Green Co	Flour and Grain Elevator	1852
1627	County Journal	Monroe, Green Co	Publishing and Printing	1887

1628	Fitzgibbons Bros	Monroe, Green Co	Wagons, Carriages and Sleighs	1880
1629	Freese, Fritz	Monroe, Green Co	Brick	1884
1630	Monroe Brewery	Monroe, Green Co	Beer	1845
1631	Monroe Electric Light & Power Co	Monroe, Green Co	Light and Power	1887
1632	Monroe Machine & Foundry Co	Monroe, Green Co	Boilers and Cheese Box Material	1895
1633	Monroe Planing Mill Co	Monroe, Green Co	Sash, Door, Blinds and Interior Work	1849
1634	Monroe Roller Mills	Monroe, Green Co	Flour and Feed	1892
1635	Monroe Sentinel	Monroe, Green Co	Publishing and Printing	1850
1636	Schneider, C. H	Monroe, Green Co	Cigars	1886
1637	Troy Steam Laundry	Monroe, Green Co	Laundry	1891
1638	Union Printing Co	Monroe, Green Co	Publishing and Printing	1897
1639	Wisconsin Mill Co	Monroe, Green Co	Condensed Milk and Cream	1894
1640	Monticello Planing Mill Co	Monticello, Green Co	Planing Lumber	1890
1641	Monticello Roller Mills	Monticello, Green Co	Flour and Feed	1863
1642	Monticello Woolen Mills	Monticello, Green Co	Blankets and Flannels	1865
1643	Buckstaff Sprague Lbr. Co	Morris, Shawano Co	Saw and Planing Mill	1884
1644	Dessert, Joseph, Lbr. Co	Mosinee, Marathon Co	Lumber, Lath and Shingles	1844
1645	Mosinee Times, The	Mosinee, Marathon Co	Publishing and Printing	1895
1646	Phillips, George B	Muskeg, Bayfield Co	Lumber	1893
1647	Staples, E. & H	Mercer, Iron Co	Lumber, Lath and Shingles	1893
1648	Jenson, R	Norrie, Marathon Co	Mfg. Lumber	1885
1649	Neye, C. A	Norrie ,Marathon Co	Planing Mill	1894
1650	Ashland Siskiwit & Iron River Logging Ry. Co	Nash, Bayfield Co	Railway Logging Co. and Repairing	1895
1651	Necedah Flour Mill	Necedah, Juneau	Flour and Feed	1884
1652	Necedah Lumber Co	Necedah, Juneau	Lumber, Lath and Shingles	1855
1653	Necedah Lumber Co	Necedah, Juneau	Lumber, Lath and Shingles	1855
1654	Alyward, Wm., & Son	Neenah, Winnebago	Mfg. Stoves	1879
1655	Bergstrom Bros., & Co	Neenah, Winnebago	Stoves and Ranges	1857
1656	Kimberly & Clark Co (Badger)	Neenah, Winnebago	Mfg. Paper	1884
1657	Kimberly & Clark Co (Globe)	Neenah, Winnebago	Mfg. Paper	1892
1658	Kimberly Clark Co. (Neenah)	Neenah, Winnebago	Mfg. Paper	1888
1659	Krueger & Lachman	Neenah, Winnebago	Mfg. Flour	1889
1660	Neenah Boot & Shoe Mfg	Neenah, Winnebago	Boots and Shoes	1882
1661	Neenah Daily News	Neenah, Winnebago	Publishing and Printing	1891
1662	Neenah Dauskeren	Neenah, Winnebago	Printing and Publishing	1891

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1663	Neenah & Menasha Gas & Electric Co.	Neenah, Winnebago	Electric Light for City	1886
1664	Neenah Paper Co.	Neenah, Winnebago	Mfg. Paper	1873
1665	Neenah Planing Mill	Neenah, Winnebago	Ornamental Wood Work	1875
1666	Neenah Steam Laundry	Neenah, Winnebago	Laundry	1896
1667	Neenah Times, The	Neenah, Winnebago	Publishing and Printing	1868
1668	Winnebago Paper Mills	Neenah, Winnebago	Mfg. Paper	1875
1669	Brule, Emery	Neillsville, Clark	Mfr. Wagon Spokes	1893
1670	Eilert, Ernest (N. Brew. Co.)	Neillsville, Clark	Mfr. Beer	1882
1671	Hein, John	Neillsville, Clark	Staves	1897
1672	Neillsville Mfg. Co	Neillsville, Clark	Furniture and Lumber	1889
1673	Neillsville Milling Co	Neillsville, Clark	Flour and Feed	1891
1674	Neillsville Planing & Saw Mill	Neillsville, Clark	Planing	1893
1675	Wolf & Korman	Neillsville, Clark	Wagons and Sleighs	1892
1676	Nekoosa Paper Co	Nekoosa	Paper, Ground Pulp, etc	1894
1677	Andrae, H. J., & Co	New London, Waupaca	Screen, Doors and Furniture	1891
1678	Excelsior Flour Mill	New London, Waupaca	Flour and Feed	1880
1679	Johnson Mfg. Co	New London, Waupaca	Lumber, Excelsior, etc	1881
1680	Knapstein, T., & Co	New London, Waupaca	Brewers and Malsters	1869
1681	Meikeljohn & Hatton	New London, Waupaca	Mfg. Lumber	1879
1682	Meikeljohn & Hatton	New London, Waupaca	Planing Mill	1879
1683	Madson, Hans P	New London, Waupaca	Machinist	1876
1684	New London Bent Wood Co	New London, Waupaca	Mfg. Bicycle Rims and Guards	1887
1685	New London Electric Light Co	New London, Waupaca	Electric Light for City	1890
1686	New London Iron Works	New London, Waupaca	Saw Mill Machinery	1891
1687	New London Press	New London, Waupaca	Publishing and Printing	1893
1688	New London Republican, The	New London, Waupaca	Publishing and Printing	1897
1689	New London Tribune	New London, Waupaca	Publishing and Printing	1890
1690	Page & Lyon Mfg. Co	New London, Waupaca	Mfg. Lumber	1885
1691	Page & Lyon Mfg. Co	New London, Waupaca	Honey Boxes and Bee Hives	1890
1692	Reuter, C. F	New London, Waupaca	Mfg. Cigars	1886
1693	New Richmond Mill	New Richmond, St. Croix	Flour and Feed	1882
1694	Northern Grain Co	New Richmond, St. Croix	Mfrs. Feed	1879

1695	Willow River Lumber Co	New Richmond, St. Croix	Lumber, Lath and Shingles	1881
1696	Briston, C. A	Oakfield, Fond du Lac	Screen Doors, Windows, etc	1880
1697	Citizen Light & Fuel Co	Oconto, Oconto	Electric Light for City	1887
1698	Cook Bros.	Oconto, Oconto	Planing Mill	1895
1699	Electric Mfg. Co	Oconto, Oconto	Electric Light Lamps	1892
1700	Enquirer, The	Oconto, Oconto	Publishing and Printing	1881
1701	Holt Lumber Co	Oconto, Oconto	Shingles and Cedar Post Mill	1892
1702	Holt Lumber Co., Plant A	Oconto, Oconto	Lumber, Lath and Shingles	1869
1703	Holt Lumber Co., Plant B	Oconto, Oconto	Planing Mill	1873
1704	Naftz, John	Oconto, Oconto	Flour	1896
1705	Oconto Brewing Co	Oconto, Oconto	Brewing and Malting	1891
1706	Oconto Company	Oconto, Oconto	Planing and Re-sawing	1865
1707	Oconto Company	Oconto, Oconto	Lumber, Lath and Shingles	1865
1708	Oconto Company Reporter	Oconto, Oconto	Publishing and Printing	1871
1709	Spies, Jacob	Oconto, Oconto	Planing Mill	1861
1710	Spies, Jacob	Oconto, Oconto	Mfg. Lumber	1859
1711	Falls Mfg. Co	Oconto Falls, Oconto	Paper Mill and Pulp Mill	1884
1712	Union Mfg. Co	Oconto Falls, Oconto	Mfrs. Lumber	1889
1713	Stearns, J. S., Lumber Co	Odanah, Ashland	Lumber, Lath and Shingles	1894
1714	Nichols, C. H., Lumber Co	Onalaska, La Crosse	Mfrs. of Lumber	1854
1715	Onalaska Brewing Co	Onalaska, La Crosse	Brewers	1894
1716	Dalles Milling Co, The	Osceola, Polk	Flour and Feed	1881
1717	Osceola Sun	Osceola, Polk	Publishers and Printers	1897
1718	Polk Co. Press, The	Osceola, Polk	Publishers and Printers	1860
1719	Allen & Weidner	Oshkosh	Publishers and Bookbinders	1867
1720	Arnold, W. T., & Co	Oshkosh	Laundry	1889
1720	Arnold, W. T., & Co	Oshkosh	Furniture and Refrigerators	1885
1722	Battis Bros	Oshkosh	Boilers, Tanks, etc	1858
1723	Becker, A. C	Oshkosh	Mfrs. Cigars	1884
1724	Brand, Robt., & Son	Oshkosh	Bank, Office and Saloon Fixt	1869
1725	Buckstaff Edwards Co	Oshkosh	Chairs and Coffins	1882
1726	Campbell & Cameron	Oshkosh	Planing Mill and Box Factory	1871
1727	Casket Hardware Co., The	Oshkosh	Casket Hardware, Silver Plating	1893
1728	Challoner, Geo., Sons Co., The	Oshkosh	Mfrs. Machinery	1863
1729	Choate, Hollister Furniture Co	Oshkosh	Furniture and Refrigerators	1894
1730	Citizens Traction Co	Oshkosh	Electric Railway	1896
1731	Clark, J. L	Oshkosh	Carriage Mfrs.	1881

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1732	Conlee Lumber Co.	Oshkosh	Lumber	1864
1733	Cook & Brown Co.	Oshkosh	Mfr. Lime and Brick	1888
1734	Daves, Hansen & Co.	Oshkosh	Pumps and Cylinders	1893
1735	Derksen & Peck	Oshkosh	Cigar Mfrs.	1887
1736	Diamond Match Co., The	Oshkosh	Match Manufacturing	1881
1737	Foote Cornish Milling Co., The	Oshkosh	Mfrs. Flour and Feed	1874
1738	Gillen Bros.	Oshkosh	Laundry	1888
1739	Globe Printing Co.	Oshkosh	Printers	1895
1740	Gould Mfg. Co.	Oshkosh	Lumber, Sash, Doors, etc.	1869
1741	Gould Mfg. Co.	Oshkosh	Mfrs. Lumber	1891
1742	Gustavus & Hintze	Oshkosh	Boiler Works	1890
1743	Hafner Lathman Mfg. Co.	Oshkosh	Sash, Doors, Blinds	1890
1744	Hayes, E. B., Machine Co.	Oshkosh	Wood Working Machinery	1893
1745	Hicks Printing Co., The	Oshkosh	Newspaper Publishers	1849
1746	Hollister, Amos, & Co.	Oshkosh	Mfrs. Lumber	1882
1747	Kitz, M. M., & Son	Oshkosh	Cisterns and Cigar Boxes	1884
1748	Laabs, Ferdinand	Oshkosh	Flour, Feed and Meal	1880
1749	McMillen, R., & Co.	Oshkosh, Winnebago Co.	Lumber, Shingles and Lath	1865
1750	McMillen, R., & Co.	Oshkosh, Winnebago Co.	Sash, Doors, Blinds, etc.	1865
1751	Mihlmann, A.	Oshkosh, Winnebago Co.	Mfr. Cigars	1876
1752	Miller & Buck	Oshkosh, Winnebago Co.	Laundry	1888
1753	Morgan Mattress Co., The	Oshkosh, Winnebago Co.	Mattress and Spring Bed Mfrs.	1889
1754	Morgan Co., The	Oshkosh, Winnebago Co.	Sash, Doors, Blinds, etc.	1889
1755	Neville, T.	Oshkosh, Winnebago Co.	Mfr. Carriages	1873
1756	Northwestern Sewer Pipe Co.	Oshkosh, Winnebago Co.	Soil and Sewer Pipe, etc.	1884
1757	Oshkosh Brewing Co., The	Oshkosh, Winnebago Co.	Brewing Beer	1894
1758	Oshkosh Clothing Mfg. Co.	Oshkosh, Winnebago Co.	Pants, Shirts and Overalls	1895
1759	Oshkosh Electric Light & Power Co.	Oshkosh, Winnebago Co.	Electric Lighting	1886
1760	Oshkosh Furniture Co.	Oshkosh, Winnebago Co.	Mfg. Furniture	1884
1761	Oshkosh Gas Light Co.	Oshkosh, Winnebago Co.	Mfrs. Gas and Electricity	1866
1762	Oshkosh Iron Works	Oshkosh, Winnebago Co.	Machine Shop and Gen. Rep.	1862
1763	Oshkosh Logging Tool Co.	Oshkosh, Winnebago Co.	Mfrs. Logging Tools	1887
1764	Oshkosh Paint Co.	Oshkosh, Winnebago Co.	Mfg. Paint	1896
1765	Oshkosh Pants Mfg. Co.	Oshkosh, Winnebago Co.	Mfrs. Working Men's Coithing	1897

1766	Oshkosh Plating Works	Oshkosh, Winnebago Co	Coffin Hardware and Metal Work	1895
1767	Oshkosh Water Works Co	Oshkosh, Winnebago Co	Supplying Water for City	1883
1768	Otto & Weber	Oshkosh, Winnebago Co	Mfrs. Cigars	1890
1769	Paine Lumber Co	Oshkosh, Winnebago Co	Lumber, Sash and Doors	1855
1770	Paine Lum. Co. Box Fcty. & Planing Mill.	Oshkosh, Winnebago Co	Mfrs. of Boxes	1855
1771	Paine Lum. Co., Saw Mill	Oshkosh, Winnebago Co	Mfrs. of Lumber	1855
1772	Palace Steam Laundry	Oshkosh, Winnebago Co	Laundry	1895
1773	Ransom, Perry	Oshkosh, Winnebago Co	Grinding and Polishing Mach	1867
1774	Radford Bros. & Co	Oshkosh, Winnebago Co	Lumber, Sash, Doors and Blinds	1878
1775	Rahr, Jr., Chas	Oshkosh, Winnebago Co	Brewing Beer	1865
1776	Sandford, A., Logging Tool Co	Oshkosh, Winnebago Co	Lumbermen's Tools, etc	1853
1777	Schmidt, H. P	Oshkosh, Winnebago Co	Mfrs. Flour	1883
1778	Schmit Bros., Trunk Co	Oshkosh, Winnebago Co	Trunks and Traveling Bags	1861
1779	Schneider, Louis	Oshkosh, Winnebago Co	Straw Covers for Bottles	1894
1780	Streich, A., & Bros	Oshkosh, Winnebago Co	Wagons and Dump Carts	1860
1781	Streich, Gabriel	Oshkosh, Winnebago Co	Wagons, Trucks and Carts	1870
1782	Thompson Carriage Co., Lt'd	Oshkosh, Winnebago Co	Buggies and Spring Wagons	1886
1783	Star Foundry & Machine Shop	Oshkosh, Winnebago Co	Foundry and Machine Shop	1881
1784	Troy Steam Laundry	Oshkosh, Winnebago Co	Laundry	1896
1785	Union Iron Works	Oshkosh, Winnebago Co	Gen. Foundry and Machine Shop	1886
1786	Viall, Edward & Co	Oshkosh, Winnebago Co	Printers and Publishers	1882
1787	Warwick & Cole Co., The	Oshkosh, Winnebago Co	Feed Mill and Grain El., Wood, Coal	1888
1788	Weber Mfg. Co	Oshkosh, Winnebago Co	Mfrs. Dress Facing	1896
1789	Williamson & Libbey Lum. Co	Oshkosh, Winnebago Co	Lumber, Sash, Doors	1856
1790	Wilson, A	Oshkosh, Winnebago Co	Carriages and Spring Wagons	1876
1791	Wisconsin Art Glass Co	Oshkosh, Winnebago Co	Leaded, Beveled Plate Glass	1896
1792	Wisconsin Grass Twine Co	Oshkosh, Winnebago Co	Hay Twine, Matting, etc	1897
1793	Witzel & Goettmann	Oshkosh, Winnebago Co	Mfrs. Cigars	1883
1794	Park Falls Paper & Pulp Co	Park Falls, Price Co	Mfrs. Paper and Pulp	1895
1795	Jacobs & Co	Pashin Lake, Barron Co	Lumber and Shingles	1889
1796	Anderson, Ole	Peshtigo, Marinette Co	Planing Mill and Mfg. Building Lumber.	1895
1797	Perley Lowe Co	Peshtigo, Marinette Co	Planing and Re-sawing	1896
1798	Peshtigo Lumber Co., The	Peshtigo, Marinette Co	Lumber, Lath, Shingles	1868
1799	Peshtigo Lumber Co., The	Peshtigo Harbor, Marinette Co	Lumber, Lath, Shingles	1865
1800	Lawrence, P. R	Petersburg, Crawford Co	Lumber	1889
1801	Parvey, C. A	Petersburg, Crawford Co	Excelsior	1898
1802	Davids, John R	Phillips, Price Co	Mfrs. Lumber	1888

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1803	Phillips Bee	Phillips, Price Co.	Publishers and Printers	1884
1804	Phillips Times, The	Phillips, Price Co.	Publishers and Printers	1876
1805	Shaw, Fayette	Phillips, Price Co.	Non-Acid Hemlock Sole Leather	1893
1806	Grant Co. News	Platteville, Grant Co.	Publishing and Printing	1884
1807	Grant Co. Witness	Platteville, Grant Co.	Publishing and Printing	1856
1808	Harmann & Sons	Platteville, Grant Co.	Mfg. Cigars	1884
1809	Hasbund, H. P.	Platteville, Grant Co.	Mfg. Flour	1876
1810	Laflin & Rand Powder Co.	Platteville, Grant Co.	Mfg. Powder	1846
1811	Mount City Broom Fcty	Platteville, Grant Co.	Mfg. Brooms	1889
1812	Plapp, John D.	Platteville, Grant Co.	Cooperage, Cheese Boxes, etc.	1891
1813	Platteville Brewery	Platteville, Grant Co.	Brewers	1863
1814	Platteville Canning Co.	Platteville, Grant Co.	Canning Tomatoes, etc.	1894
1815	Platteville Electric Light Co.	Platteville, Grant Co.	Light for City	1892
1816	Rickord Bros.	Platteville, Grant Co.	Foundry	1878
1817	Sickles, M. S., & Co.	Platteville, Grant Co.	Mfg. Cigars	1874
1818	Snowden Bros.	Platteville, Grant Co.	Laundry	1892
1819	Weisse & Schroeder	Platteville, Grant Co.	Feed Mill	1893
1820	Weeker Bros.	Platteville, Grant Co.	Saw, Grist and Feed Mill	1857
1821	Plum City Hard Wood Lum. Co.	Plum City, Pierce Co.	Hardwood Lumber	1890
1822	Sutter, H. & T.	Plum City, Pierce Co.	Hardwood Lumber	1893
1823	Center & Plymouth Roller Mills	Plymouth, Sheboygan Co.	Flour, Corn Meal and Feed	1850
1824	Perfection Cash Registry Co.	Plymouth, Sheboygan Co.	Cash Registers	1895
1825	Plymouth Foundry Co.	Plymouth, Sheboygan Co.	Iron Castings	1897
1826	Plymouth Furniture Co.	Plymouth, Sheboygan Co.	Furniture	1886
1827	Plymouth Laundry	Plymouth, Sheboygan Co.	Laundry	1895
1828	Plymouth Reporter, The	Plymouth, Sheboygan Co.	Publishing and Printing	1872
1829	Schneider Bros.	Plymouth, Sheboygan Co.	Malsters and Mfg. Malt Coffee	1854
1830	Schram & Huson Chair Co.	Plymouth, Sheboygan Co.	Mfg. Chairs	1888
1831	Schreiner, A.	Plymouth, Sheboygan Co.	Malsters, Beer Bottling	1879
1832	Schwartz, Wm., Mfg. Co.	Plymouth, Sheboygan Co.	Book Cases, Kitchen Furn., etc.	1892
1833	Thurman, F., Co.	Plymouth, Sheboygan Co.	Mfg. Seeders, etc., and Gen. Rep.	1887
1834	Drier, Mike	Porcupine, Pepin Co.	Hardwood Lumber	1895

1835	Edwards, John, Mfg. Co	Port Edwards, Wood Co	Lumber	1897
1836	Northwestern Lum. Co., The	Porter's Mill, Eau Claire Co	Lumber, Lath, Shingles, and Feed	1859
1837	Badger Underwear Co	Portage, Columbia Co	Mfg. Underwear	1891
1838	Breese Loomis & Co	Portage, Columbia Co	Mfg. Clothing	1868
1839	Buckley & Leisch	Portage, Columbia Co	Mfg. Clothing	1895
1840	C., M. & St. P. R'y	Portage, Coumbia Co	Repair Shop	1868
1841	Epstein, Henry	Portage, Coumbia Co	Beer	1875
1842	Eulburg Bros	Portage, Columbia Co	Beer	1884
1843	Falconer, Boynton Mfg. Co	Portage, Columbia Co	Shirts, Pants, Overalls	1892
1844	Portage Democrat	Portage, Columbia Co	Printers and Publishers	1876
1845	Portage Hosiery Co	Portage, Columbia Co	Hosiery	1881
1846	Portage Steam Laundry Co	Portage, Columbia Co	Laundry	1878
1847	Portage Underwear Co	Portage, Columbia Co	Mfg. Underwear	1888
1848	Wisconsin State Register	Portage, Columbia Co	Publishers and Printers	1853
1849	York, J. W	Portage, Columbia Co	Flour and Feed	1888
1850	Biedermann, G., & Co	Port Washington, Ozaukee Co	Brewers and Malsters	1881
1851	Borth Bros	Port Washington, Ozaukee Co	Cheese Boxes, Tables etc	1884
1852	Gilson Mfg. Co	Port Washington, Ozaukee Co	Foundry and Machinist	1851
1853	Guenther, S. G., & Son	Port Washington, Ozaukee Co	Brick and Tiles	1885
1854	Martin & Wesler	Port Washington, Ozaukee Co	Foundry	1848
1855	Mollinger & Prame Co	Port Washington, Ozaukee Co	Office Furniture	1884
1856	Mueller, C. A	Port Washington, Ozaukee Co	Mfg. Leather	1871
1857	Port Washington Steam Laundry	Port Washington, Ozaukee Co	Laundry	1897
1858	Schramke, John	Port Washington, Ozaukee Co	Mfg. Brick	1897
1859	Stelling, R	Port Washington, Ozaukee Co	Mfg. Flour	1883
1860	Western Malleable & Grey Iron Mfg. Co	Port Washington, Ozaukee Co	Founders and Machinists	1871
1861	Wisconsin Chair Co., The	Port Washington, Ozaukee Co	Wood Seat and Upholstered Chairs	1888
1862	Moore & Keppel Co	Port Wing, Bayfield Co	Lumber	1895
1863	Runnoe, Isaac	Pound, Marinette, Co	Saw Mill	1892
1864	Horstfall, D. F	Prairie du Chien	Lumber	1892
1865	Hunting Elevator Co	Prairie du Chien	Grain Elevator	1884
1866	Inter State Packing Co	Prairie du Chien	Canning Vegetables	1889
1867	Keyes, Edward	Prairie du Chien	Honey Boxes	1898
1868	P. du Chien Butter Factory	Prairie du Chien	Butter and Cheese	1895
1869	P. du Chien Courier	Prairie du Chien	Printing and Publishing	1848
1870	P. du Chien Electric Light Co	Prairie du Chien	Light	1894
1871	P. du Chien Mfg. Co	Prairie du Chien	Cooperage	1890

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Estab-lished.
1872	P. du Chien News	Prairie du Chien	Printing and Publishing	1864
1873	P. du Chien Steam Laundry	Prairie du Chien	Laundry	1895
1874	P. du Chien Woolen Mills	Prairie du Chien	Flannels	1891
1875	Schumann Menges Brewing Co	Prairie du Chien	Beer	1872
1876	Winiger, F	Prairie du Chien	Flour and Feed	1885
1877	Prentice Heading Co	Prentice, Price Co	Mfr. Heading	1894
1878	Prentice Tannery	Prentice, Price Co	Mfrs. Sole Leather	1891
1879	Quinnesec Falls Co	Quinnesec Falls, Marinette Co	Wood, Pulp and Paper	1888
1880	Adams, E. B., & Son	Racine, Racine Co	Bolster Springs and Wagon Jacks	1891
1881	Alshuler, Chas., Mfg. Co	Racine, Racine Co	Overalls and Shirts	1885
1882	Badger Electric Co	Racine, Racine Co	Supplying Light	1886
1883	Beebe Mfg. Co	Racine, Racine Co	Carriages and Wagons	1892
1884	Belle City Basket Co	Racine, Racine Co	Mfrs. of Baskets	1895
1885	Belle City Malleable Iron Co	Racine, Racine Co	Iron Castings and Wrought Iron	1893
1886	Belle City Mfg. Co	Racine, Racine Co	Mfrs. Agricultural Implements	1884
1887	Belle City Milling Co	Racine, Racine Co	Mfrs. Flour	1895
1888	Belle City St. R'y Co	Racine, Racine Co	Power and Lighting	1892
1889	Buse & Williams	Racine, Racine Co	Laundry	1887
1890	Cape, James & Son	Racine, Racine Co	Contractors of Public Wks	1882
1891	Carroll, Jos. C	Racine, Racine Co	Coal and Wood Yard	1895
1892	Case, J. I., Plow Wks	Racine, Racine Co	Mfrs. of Plows	1879
1893	Case, J. I., Threshing Mach. Co	Racine, Racine Co	Threshing Mach. and Gas Engines	1843
1894	Chicago Rubber Clothing Co	Racine, Racine Co	Rubber Clothing	1886
1895	Clancy, J. F., & Co	Racine, Racine Co	Coal and Wood Yard	1892
1896	Collier, T. P., Mfg. Co	Racine, Racine Co	Mangles and Bicycles	1892
1897	Common Sense Trunk Co	Racine, Racine Co	Mfrs. of Trunks	1888
1898	Dickey, A. P., Mfg. Co	Racine, Racine Co	Fanning Mills, etc	1885
1899	Domestic Steam Laundry	Racine, Racine Co	Laundry	1895
1900	Driver, T., & Sons Mfg. Co	Racine, Racine Co	Sash and Doors	1870
1901	Elsendrath Co., The B. D	Racine, Racine Co	Mfrs. of Leather	1886
1902	Emerson Linseed Oil Works	Racine, Racine Co	Linseed Oil and Oil Cake	1890
1903	Fish Bros. Wagon Co	Racine, Racine Co	Mfrs. of Wagons	1863
1904	Forster & Williams Mfg. Co	Racine, Racine Co	Agricultural Implements	1880

1905	Freeman & Sons Mfg. Co.	Racine, Racine Co.	Agricultural Implements	1886
1906	Freeman & Sons Mfg. Co., The S.	Racine, Racine Co.	Mfrs. of Boilers	1895
1907	Gold Medal Camp Furn. & Novelty Co.	Racine, Racine Co.	Camp and Folding Furniture, etc.	1892
1908	Gunther Co., The	Racine, Racine Co.	Machine Shop	1860
1909	Gunther Co., The F. W.	Racine, Racine Co.	White Fibre Sauerkraut	1882
1910	Hagman Steam Laundry	Racine, Racine Co.	Laundry	1885
1911	Hartman Trunk Co.	Racine, Racine Co.	Trunks and Traveling Bags	1890
1912	Higgins, Ansted, Spring Co.	Racine, Racine Co.	Carriage and Wagon Springs	1884
1913	Horlicks Food Co.	Racine, Racine Co.	Malted Milk and Infants Food	1887
1914	Hunter Curry Comb Co.	Racine, Racine Co.	Mfrs. Curry Combs	1896
1915	Hurlbut Co., The	Racine, Racine Co.	Brass and Iron Castings	1872
1916	Imperial Bit & Snap Co.	Racine, Racine Co.	Saddlery and Wagon Hardware	1890
1917	Johnson & Field Co.	Racine, Racine Co.	Fanning Mills, etc.	1876
1918	Journal Printing Co., The.	Racine, Racine Co.	Publishing and Printing	1856
1919	Klinkert, E.	Racine, Racine Co.	Brewers	1875
1920	Lang Mfg. Co.	Racine, Racine Co.	Machine Shop	1893
1921	Madson, A.	Racine, Racine Co.	Sheepskin Tanners	1865
1922	Mfrs. Printing Co.	Racine, Racine Co.	Printers and Publishers	1886
1923	Miller Co., The J.	Racine, Racine Co.	Boots and Shoes	1872
1924	Mitchell & Lewis Co.	Racine, Racine Co.	Mfrs. Wagons	1885
1925	Model Steam Laundry	Racine, Racine Co.	Laundry	1895
1926	Pease, E. H., Mfg. Co.	Racine, Racine Co.	Mfrs. of Engines	1886
1927	Philbrook Shoe Co., The	Racine, Racine Co.	Mfrs. of Shoes and Packs	1872
1928	Platz, F., Sons Leather Co.	Racine, Racine Co.	Mfrs. of Harness Leather	1860
1929	Pugh, W. H.	Racine, Racine Co.	Coal and Wood Yard	1852
1930	Racine Basket Co.	Racine, Racine Co.	Mfrs. Baskets	1869
1931	Racine Boat Mfg. Co.	Racine, Racine Co.	Steel and Wood Boats and Engines	1890
1932	Racine Cement & Pipe Co.	Racine, Racine Co.	Mfrs. Cement and Pipe	1883
1933	Racine Fire Engine Co.	Racine, Racine Co.	Fire Engines, Hose Carts, etc.	1893
1934	Racine Hardware Co.	Racine, Racine Co.	Church and School Furniture	1874
1935	Racine Knitting Works	Racine, Racine Co.	Mfrs. Seamless Hosiery	1896
1936	Racine Mal. & Wrought Iron Co., The	Racine, Racine Co.	Iron Castings and Specialties	1870
1937	Racine Nail & Tack Co.	Racine, Racine Co.	Mfrs. Nails and Tacks	1890
1938	Racine Paper Box Co.	Racine, Racine Co.	Mfrs. Paper Boxes	1893
1939	Racine Paper Goods Co.	Racine, Racine Co.	Mfrs. Paper Specialties	1894
1940	Racine Planing Mill Mfg. Co.	Racine, Racine Co.	Sash, Doors and Blinds	1892
1941	Racine Refrigerator Co.	Racine, Racine Co.	Mfrs. Refrigerators	1879
1942	Racine Shoe Co.	Racine, Racine Co.	Shoes	....
1943	Racine Traveling Bag Co.	Racine, Racine Co.	Traveling Bags and Suspenders	1890
1944	Racine Wagon & Carriage Co.	Racine, Racine Co.	Mfrs. Wagons and Carriages	1869

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
1945	Racine Woolen Mills	Racine, Racine Co.	Mfrs. of Woolens	1865
1946	Racine Yacht & Boat Works	Racine, Racine Co.	Mfrs. of Boats	1895
1947	Racine Trunk Co.	Racine, Racine Co.	Mfrs. of Trunks	1890
1948	Roberts, John M.	Racine, Racine Co.	Mfrs. of Cut Stone	1881
1949	Roberts & Case	Racine, Racine Co.	Flour and Feed	1892
1950	Secor. M. M. Trunk Co.	Racine, Racine Co.	Trunks and Traveling Bags	1861
1951	Stecher, Weber & Huetten Mfg. Co.	Racine, Racine Co.	Sash, Doors, Blinds and Planing Mill	1876
1952	Times Publishing Co.	Racine, Racine Co.	Publishing and Printing	1884
1953	West Steam Laundry	Racine, Racine Co.	Steam Laundry	1893
1954	Winship Mfg. Co., The	Racine, Racine Co.	Pumps, Windmills and Tanks	1864
1955	Effinger, F.	Reedsburg, Sauk Co.	Brewers	1885
1956	Heaton, J. G.	Reedsburg, Sauk Co.	Mfrs. of Flour	1897
1957	Morgan Bldg. Co.	Reedsburg, Sauk Co.	Contractors	1881
1958	Reedsburg Buggy Co.	Reedsburg, Sauk Co.	Buggies and Carriages	1878
1959	Reedsburg Bldg. & Lumber Co.	Reedsburg, Sauk Co.	Contractors and Dealers in Lumber	1879
1960	Reedsburg Electric Light & Water Co.	Reedsburg, Sauk Co.	Supplying Water and Light	1894
1961	Reedsburg Free Press	Reedsburg, Sauk Co.	Printers and Publishers	1860
1967	Reedsburg Woolen Mills	Reedsburg, Sauk Co.	Mfrs. of Woolen Cloth	1886
1963	Sanders, A. M.	Reedsburg, Sauk Co.	Wagons and Buggies	1886
1964	Schoephoester, William	Reedsburg, Sauk Co.	Staves and Heading	1890
1965	Heberer & Kreuger	Reedsville, Manitowoc Co.	Butter and Cheese	1896
1966	Martz Bros.	Reedsville, Manitowoc Co.	Grist Mill	1892
1967	Reedsville Mfg. Co.	Reedsville, Manitowoc Co.	Syrup and Nail Kegs, Ind. Clubs, etc.	1897
1968	Rusch, A. H.	Reedsville, Manitowoc Co.	Lumber and Planing Mill	1867
1969	Atlas Lumber Co.	Rhinelander, Oneida Co.	White Pine Lumber	1895
1970	Brown Bros. Lumber Co.	Rhinelander, Oneida Co.	Lumber, Lath and Shingles	1890
1971	Brown-Robbins, Lum. Co., The	Rhinelander, Oneida Co.	Lumber, Lath and Shingles	1888
1972	Clayton, George	Rhinelander, Oneida Co.	Lumber, Lath and Shingles	1887
1973	Conro, Abner, & Son	Rhinelander, Oneida Co.	Mfrs. of Lumber	1882
1974	Fall, H. J., & Co.	Rhinelander, Oneida Co.	Lumber, Lath and Shingles	1893
1975	Faust Electric Light Co.	Rhinelander, Oneida Co.	Electric Lighting	1890
1976	Herald Pub. Co., The	Rhinelander, Oneida Co.	Publishers and Printers	1884
1977	Kirk, James S., Co.	Rhinelander, Oneida Co.	Mfrs. of Boxes	1893
1978	Marquardt, M.	Rhinelander, Oneida Co.	Mfrs. of Cigars	1894

1979	Model Steam Laundry	Rhinelander, Oneida Co.	Steam Laundry	1895
1980	New North, The	Rhinelander, Oneida Co.	Publishers and Printers	1882
1981	Rhinelander Iron Co.	Rhinelander, Oneida Co.	Saw Mill Machinery	1884
1982	Rib River Lumber Co.	Rhinelander, Oneida Co.	Mfrs. of Lumber	1892
1983	Soo Planing Mill Co.	Rhinelander, Oneida Co.	Custom Planing	1889
1984	Stevens Lumber Co.	Rhinelander, Oneida Co.	Lumber, Lath and Shingles	1889
1985	Vindicator, The	Rhinelander, Oneida Co.	Publishers and Printers	1886
1986	Wabash Screen Door Co.	Rhinelander, Oneida Co.	Screen Doors and Windows	1885
1987	Wilson & Bronson	Rhinelander, Oneida Co.	Lumber and Custom Planing Mill	1892
1988	Kennedy, J. J	Rib Lake, Taylor	Lumber, Lath and Shingles	1881
1989	Shaw, Fayette	Rib Lake, Taylor	Non-acid Hemlock Sole Leather	1892
1990	Hintz, F. J	Rib Lake, Taylor	Lumber and Shingles	1898
1991	Kennedy, J. J	Rib Lake, Taylor	Lumber, Lath and Shingles	1898
1992	Hatten & Co.	Rice Lake, Barron	Mfrs. Barrel Stock	1886
1993	Mercier, C.	Rice Lake, Barron	Mfrs. Lumber	1892
1994	Rice Lake Lumber Co.	Rice Lake, Barron	Lumber, Lath and Shingles	1881
1995	Rice Lake Mfg. Co.	Rice Lake, Barron	Sash and Doors and Contractors	1893
1996	Reuter Hub & Spoke Co.	Rice Lake, Barron	Mfrs. Hubs and Spokes	1886
1997	Clay Lumber Co.	Ringle, Marathon	Mfg. Lumber	1888
1998	Clay Lumber Co.	Ringle, Marathon	Mfg. Brick	1892
1999	The Commonwealth	Ripon	Printing and Publishing	1863
2000	Powers, J. J	Ripon	Cold Storage	1891
2001	Ripon Light & Water Co.	Ripon	Light and Water	1891
2002	Ripon Steam Laundry	Ripon	Laundry	1896
2003	Scheafer, W. E	Ripon	Foundry	1882
2004	Bouten & Germain Co.	Ripon	Gloves and Mittens	1897
2005	Crowther, W. S., & Co.	Ripon	Flour and Feed	1891
2006	Haas, John	Ripon	Mfg. Beer	1865
2007	Ripon Knitting Works	Ripon	Hosiery, Gloves and Mittens	1883
2008	Zinzon Bros. Mfg. Co.	Ripon	Interior Woodwork	1896
2009	Timms, C. J	Ripon	Berry Boxes	1885
2010	Wicks & Sons	Ripon	Farm Implements	1883
2011	Lind, A. W	River Falls, Pierce	Carriages, Wagons, etc.	1881
2012	Vanvoorhis & Co.	River Falls, Pierce	Flour and Feed	1896
2013	Churchill, F. B	Rock Elm, Pierce	Mfrs. Hardwood	1893
2014	Hahn, Chas. A., & Sons	Rock Elm, Pierce	Hardwood Lumber	1867
2015	Partridge, L., & Decker Bros	Rock Elm, Pierce	Hardwood Lumber	1887
2016	Brimer Bros. Co.	Richland Center	Flannels	1890
2017	C. O. D. Laundry	Richland Center	Laundry	1895

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2018	Fries, John C.	Richland Center	Cooperage	1889
2019	Krauskop, A. H.	Richland Center	Lumber	1891
2020	Parfry, A. C.	Richland Center	Lumber and Excelsior	1896
2021	Parfry, A. C.	Richland Center	Flour and Feed	1881
2022	James, N. L.	Richland Center	Lumber	1881
2023	Strong, George H.	Richland Center	Elec. Light	1895
2024	Republican Observer	Richland Center	Printing and Publishing	1855
2025	Richland Rustic	Richland Center	Printing and Publishing	1877
2026	Sampson, O. L.	Sanborn, Ashland Co.	Shingles and Heading	1892
2027	Defer, J. J.	Saxon, Iron Co.	Lumber, Heading and Shingles	1897
2028	Kastemeyer, Wm.	Schlessingerville, Wash. Co.	Mfrs. Brick	1882
2029	Rosenheimer, L.	Schlessingerville, Wash. Co.	Mfrs. Brick	1887
2030	Stark, Charles	Schlessingerville, Wash. Co.	Brewers and Malters	....
2031	Brooks & Ross Lumber Co.	Schofield, Marathon Co.	Lumber, Lath, Shingles and Pickets	1884
2032	Hillary & Co.	Shullsburg, Lafayette Co.	Feed Mill	1884
2033	Pick and Gad	Shullsburg, Lafayette Co.	Publishers and Printers	1852
2034	Dean, F. H.	Seymour, Outagamie Co.	Mfrs. Stump Pullers	1896
2035	Northwestern Mfgr. Co.	Seymour, Outagamie Co.	Lumber	1886
2036	Seymour Press	Seymour, Outagamie Co.	Publishers and Printers	1886
2037	Seymour Wooden Ware Co.	Seymour, Outagamie Co.	Mfrs. Mooden Ware	1897
2038	Stewart Bros.	Seymour, Outagamie Co.	Mfgr. Flour and Feed	1878
2039	Kast, F. W.	Shawano, Shawano Co.	Mfgr. Flour and Feed	1865
2040	Nachtway & Beventz	Shawano, Shawano Co.	Planing Mill and Machine Shop	1897
2041	Madison Lumber Co.	Shawano, Shawano Co.	Mfg. Lumber	1893
2042	Raddant, Emil T.	Shawano, Shawano Co.	Brewers and Maltsters	1883
2043	Shawano Steam Laundry	Shawano, Shawano Co.	Laundry	1896
2044	Wolf River Paper & Fibre Co.	Shawano, Shawano Co.	Mfg. Wood Pulp	1894
2045	Aladdin Soap Co.	Sheboygan, Sheboygan Co.	Mfrs. of Soap	1891
2046	American Folding Bed Factory	Sheboygan, Sheboygan Co.	Mfrs. Folding Beds	1893
2047	American Mfg. Co.	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1887
2048	Balzer, John	Sheboygan, Sheboygan Co.	Mfrs. Wagons and Carriages	1854
2049	Big Hat Steam Laundry Co.	Sheboygan, Sheboygan Co.	Laundry	1892

2050	Bort, P. D.	Sheboygan, Sheboygan Co.	Laundry	1888
2051	Columbia Shoe Co.	Sheboygan, Sheboygan Co.	Mfr. Boots, Shoes and Slippers	1893
2052	Crocker Chair Factory, Plant A	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1887
2053	Crocker Chair Co., Plant B	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1884
2054	Demokrat Ptg. Co.	Sheboygan, Sheboygan Co.	Newspaper, Books, and Job Ptg.	1857
2055	Dillingham Mfg. Co.	Sheboygan, Sheboygan Co.	Mfr. of Refrigerators & Wooden Ware.	1884
2056	Dungan & Hanford	Sheboygan, Sheboygan Co.	Mfr. Cigars	1887
2057	Excelsior Wrapper Co.	Sheboygan, Sheboygan Co.	Mfrs. Bottle Wrappers	1888
2058	Freyberg, C. B., & Bros.	Sheboygan, Sheboygan Co.	Planing Mill	1876
2059	Frost Veneer Seating Co.	Sheboygan, Sheboygan Co.	Mfrs. Railroad Cars and Depot Seating.	1883
2060	Grafton Toy Co.	Sheboygan, Sheboygan Co.	Mfrs. Toys and Express Wagons	1879
2061	Geele Hardware Co.	Sheboygan, Sheboygan Co.	Mfrs. Hardware	1860
2062	Gutsch Brewing Co.	Sheboygan, Sheboygan Co.	Brewers	1845
2063	Howe, L. K.	Sheboygan, Sheboygan Co.	Printing and Publisher	1866
2064	Illinois Leather Co.	Sheboygan, Sheboygan Co.	Cleaning and Drying Hair	1895
2065	Jenkins Machine Co.	Sheboygan, Sheboygan Co.	Mfrs. of Machinery	1876
2066	Jung, J. & W.	Sheboygan, Sheboygan Co.	Mfrs. High Grade Carriages	1859
2067	Kolker, Heyssen & Stehn Mfg. Co.	Sheboygan, Sheboygan Co.	Enameled Ware and Agrl. Implements.	1879
2068	Mattoon Mfg. Co.	Sheboygan, Sheboygan Co.	Mfrs. Furniture	1881
2069	Meyer, Phil., Co.	Sheboygan, Sheboygan Co.	Machine Shop and Foundry	1893
2070	Meyers Machine Shops	Sheboygan, Sheboygan Co.	Machine Repairing	1887
2071	Mueller, H. G., & Sons	Sheboygan, Sheboygan Co.	Planing Mill and Cheese Boxes	1892
2072	Musical Instrument Mfg. Co.	Sheboygan, Sheboygan Co.	Mfrs. Musical Instruments	....
2073	Optenberg & Sonnemann	Sheboygan, Sheboygan Co.	Mfrs. Engines and Boilers	1884
2074	Patt, A. W.	Sheboygan, Sheboygan Co.	Publishers and Printers	1880
2075	Reiss Coal Co.	Sheboygan, Sheboygan Co.	Coal, Wood and Salt	1880
2076	Roenitz Leather Co.	Sheboygan, Sheboygan Co.	Mfrs. of Leather	1853
2077	Phoenix Chair Co.	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1875
2078	Schreier Konrad Co.	Sheboygan, Sheboygan Co.	Brewers	1854
2079	Schultheiss Bros.	Sheboygan, Sheboygan Co.	Iron Workers	1886
2080	Sheboygan Brick & Tile Co.	Sheboygan, Sheboygan Co.	Mfrs. Brick and Tile	1889
2081	Sheboygan Chair Co.	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1869
2082	Sheboygan Cigar Mold Co.	Sheboygan, Sheboygan Co.	Mfrs. of Cigar Molds	1892
2083	Sheboygan Coal Co.	Sheboygan, Sheboygan Co.	Dealers in Coal and Wood	1888
2084	Sheboygan Co. News	Sheboygan, Sheboygan Co.	Printers and Publishers	1879
2085	Sheboygan Co. Journal	Sheboygan, Sheboygan Co.	Newspaper Publishers	1880
2086	Sheboygan Knitting Co.	Sheboygan, Sheboygan Co.	Knit Goods	1880
2087	Sheboygan Light & Railway Co.	Sheboygan, Sheboygan Co.	Electric Light Motor P. & S. R.	1895
2088	Sheboygan Mineral Water Co.	Sheboygan, Sheboygan Co.	Bottlers of Mineral Water	1881
2089	Sheboygan Novelty Works	Sheboygan, Sheboygan Co.	Book Cases, Cabinets, etc.	1890
2090	Sheboygan Volksblatt Co.	Sheboygan, Sheboygan Co.	Pub. of Newspaper	1895

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2091	Spratt, Geo., & Co.	Sheboygan, Sheboygan Co.	Mfrs. of Chairs	1884
2092	Vollarth Mfg. Co.	Sheboygan, Sheboygan Co.	Mfrs. Iron Ware and Bath Tubs	1875
2093	Winter Lumber Co.	Sheboygan, Sheboygan Co.	Mfrs. Hall Racks and Fixtures	1888
2094	Zimmerman, E. F. W.	Sheboygan, Sheboygan Co.	Booksellers and Binders	1874
2095	Zschetzsche & Son	Sheboygan, Sheboygan Co.	Mfrs. Leather	1874
2096	Zurherde Brick Co.	Sheboygan, Sheboygan Co.	Mfrs. Brick	1887
2097	Brichner Woolen Mills Co.	Sheboygan, Sheboygan Co.	Mfrs. Woolen Cloth	1878
2098	Richardson Bros.	Sheboygan, Sheboygan Co.	Mfrs. Cheese Boxes and Chairs	1856
2099	Search Mfg. Co.	Sheboygan, Sheboygan Co.	Mfrs. Agri. Implements	1896
2100	Sheboygan Falls Tannery	Sheboygan Falls, Sheboygan Co.	Mfr. of Leather	1868
2101	Shell Lake Lumber Co.	Shell Lake, Washburn Co.	Lumber, Lath and Shingles	1881
2102	Shiocton Lumber Co.	Shiocton, Outagamie Co.	Lumber, Lath and Shingles	1892
2103	Soyson, P. U.	Shiocton, Outagamie Co.	Flour and Grain Elevators	1897
2104	Mills & Le Clair Lumber Co.	South Range, Douglas Co.	Lumber	....
2105	Newton, O. I., & Sons Co.	Sparta, Monroe Co.	Wrapping Paper	1868
2106	Sparta Iron Works Co.	Sparta, Monroe Co.	Mfrs. Iron Castings	1859
2107	Brown, L. A.	Spring Valley, Pierce Co.	Hardwood Lumber	1895
2108	S. Valley Spoke and Heading Co.	Spring Valley, Pierce Co.	Spokes and Heading	....
2109	John Staadt Lumber Co.	Staadt, Marathon Co.	Lumber	1890
2110	Northwestern Lumber Co.	Stanley, Chippewa Co.	Lumber, Lath and Shingles	1892
2111	Stanley Mfg. Co.	Stanley, Chippewa Co.	Slack Barrel Heading	1893
2112	Stanley Republican	Stanley, Chippewa Co.	Publishers and Printers	1896
2113	U. S. Leather Co.	Stanley, Chippewa Co.	Mfrs. Sole Leather	1895
2114	Williams & Salsech	Star Lake, Vilas Co.	Lumber, Lath and Shingles	1894
2115	Inter-state Park Mills	St. Croix Falls, Polk Co.	Flour and Feed	1895
2116	Seery & Messer	St. Croix Falls, Polk Co.	Mfrs. Heading	1886
2117	Seery & Co.	St. Croix Falls, Polk Co.	Mfrs. Lumber	1894
2118	Wall, S. J.	St. Croix Falls, Polk Co.	Planing Lumber	1894
2119	Wanhardt, I. P.	St. Croix Falls, Polk Co.	Planing Lumber	1881

2120	Blake & Co.	Stevens Point, Portage Co.	Mfrs. of Hosiery	1898
2121	Central City Iron Works	Stevens Point, Portage Co.	Mfrs. Mill Machinery	1890
2122	Hoeffler Mfg. Co.	Stevens Point, Portage Co.	Carriages and Potato Planters	1889
2123	Jackson Milling Co.	Stevens Point, Portage Co.	Mfrs. Flour and Feed	1877
2124	Kuenzel, G.	Stevens Point, Portage Co.	Mfr. of Beer	1897
2125	Mitchell, W. W.	Stevens Point, Portage Co.	Flour and Lumber	1878
2126	Pfiffner & Rounds Co.	Stevens Point, Portage Co.	Mfrs. Lumber	1891
2127	Rice & Bro. Co.	Stevens Point, Portage Co.	Founders and Machinists	1868
2128	South Side Lumber Co.	Stevens Point, Portage Co.	Mfrs. Lumber	....
2129	Stevens Pt. Box Co.	Stevens Point, Portage Co.	Mfrs. of Boxes	1893
2130	Stevens Point Journal	Stevens Point, Portage Co.	Publishers and Printers	1873
2131	Vetter, H. A., Mfg. Co.	Stevens Point, Portage Co.	Sash and Doors	1893
2132	Week Lumber Co.	Stevens Point, Portage Co.	Lumber, Lath and Shingles	1851
2133	Wis. Central Ry. Shops	Stevens Point, Portage Co.	Repair Shops	1870
2134	Anson Eldred Co.	Stiles, Oconto Co.	Mfgs. Lumber	1853
2135	Blakeslee, J.	Stoughton, Dane Co.	Feed Mill and G. Elevator	1867
2136	Diamond Laundry	Stoughton, Dane Co.	Laundry	1894
2137	Hintze, C. M.	Stoughton, Dane Co.	Mfrs. Cigars	1881
2138	Stoughton Wagon Co.	Stoughton, Dane Co.	Mfrs. Wagons and Sleighs	1865
2139	Connor, R., Co.	Stratford, Marathon Co.	Mfrs. Lumber	1891
2140	Connor, R., Co.	Stratford, Marathon Co.	Planing Mill	1895
2141	Morrison & Miller	Stratford, Marathon Co.	Mfrs. Lumber	1890
2142	Bickdahl, H. M.	Soldiers' Grove, Crawford Co.	Tobacco (sorting)	1893
2143	Kickapoo Excelsior Co.	Soldiers' Grove, Crawford Co.	Excelsior	1892
2144	Peterson, Atley	Soldiers' Grove, Crawford Co.	Lumber	1868
2145	Soldiers' Grove Stave Co.	Soldiers' Grove, Crawford Co.	Staves	1898
2146	Marsh, Jos. C.	Spokeville, Clark Co.	Lumber	1885
2147	Ellingson Bros.	Stetsonville, Taylor Co.	Lumber and Shingles	1892
2148	Hurlburt, J. J.	Steubin	Lumber	1888
2149	Sauk City Canning Co.	Sauk City	Canning Vegetables	1895
2150	Miss. River Logging Co.	Strickland, Chippewa Co.	Mfrs. Lumber	....
2151	Miss. River Logging Co.	Strickland, Chippewa Co.	Lumber, Lath and Shingles	....
2152	Kerckhoffer, Henry	Sugar Bush, Outagamie Co.	Mfrs. Shingles	1896
2153	Advocate, The	Sturgeon Bay, Door Co.	Publishers and Printers	1862
2154	Brown, W. O., Mfg. Co.	Sturgeon Bay, Door Co.	Mfrs. Shingles	1892

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2155	Door County Democrat	Sturgeon Bay, Door Co	Publishers and Printers	1892
2156	Ives Bros.	Sturgeon Bay, Door Co	Founders and Machinists	1886
2157	Lawson, L. A	Sturgeon Bay, Door Co	Mfrs. Furniture	1896
2158	Baugratz Lumber Co	Sturgeon Bay, Door Co	Shingles, Lath and Lumber	1892
2159	Reynolds Preserving Co	Sturgeon Bay, Door Co	Canning Peas	1896
2160	Riebold & Walthers & Co	Sturgeon Bay, Door Co	Boat Builders and Repairers	1856
2161	Shaw & Torkeldsen	Sturgeon Bay, Door Co	Grist Mill and Mfg. Shingles	1885
2162	Sturgeon Bay Electric Light Co	Sturgeon Bay, Door Co	Electric Light	1891
2163	Washburn, N	Sturgeon Bay, Door Co	Planing Mill	1890
2164	Anchor Mill Co	Superior	Mfrs. of Flour	1893
2165	Belt Line Elevator Co	Superior	Grain Elevator	1893
2166	Daisy Roller Mills, The	Superior	Mfrs. of Flour	1893
2167	C., S. P., M. & O. Ry	Superior	Repair Shops	1894
2168	Hardwood Mfg. Co., The	Superior	Mfrs. of Barrels	1891
2169	Listman, William, Milling Co., The	Superior	Mfrs. of Flour	1893
2170	Northern P. R'y Co. Shops	Superior	R'y Shops	1890
2171	Superior Co-operative Barrel Co	Superior	Mfrs. of Barrels	1895
2172	Superior Terminal Elevator Co	Superior	Grain Elevator	1893
2173	Duplex Mfg. Co	South Superior	Wind Mills and Pumps	1892
2174	Webster Mfg. Co	South Superior	Chairs and Hardwood Lumber	1891
2175	Adamant Mfg. Co	West Superior	Adamant Plaster	1889
2176	American Steel Barge Co	West Superior	Steel, Metal Ships and Engines	1890
2177	Arnold & Schimmel	West Superior	Heavy Sheet Iron Work	1892
2178	Bagley & McNaughton	West Superior	Confectionery	1891
2179	Barker, C. S	West Superior	General Contractor	1867
2180	Bingham Bros.	West Superior	Roofing & Cornice Works	1888
2181	Blatz, V., Brewing Co., Branch Office	West Superior	Brewing Co	1890
2182	Broadway Laundry	West Superior	Laundry	1887
2183	Burdick Mfg. Co	West Superior	Heavy Sheet Iron and Copper	1890
2184	Burke, J. A	West Superior	R'y and General Contractor	1887
2185	Carlson Bros.	West Superior	Tin, Copper & Sheet Iron Wk	1891
2186	Clements, F. V., & Co	West Superior	Cigars	1893
2187	Clithero Coal & Lumber Co	West Superior	Coal and Lumber Dealers	1890
2188	Commander Flour Milling Co	West Superior	Mfrs. Flour	....

2189	Cowie Bros.	West Superior	Sash and Doors	1895
2190	Dowd Sons & Co.	West Superior	Mfrs. Barrels	1857
2191	Douglas County Dairy	West Superior	Dairy	1889
2192	Eastern R'y of Minnesota	West Superior	Repair Shops	1888
2193	Eastern R'y of Minn., Flour Dock	West Superior	Freight	1889
2194	Edwards, W. C., Lumber Co.	West Superior	Wholesale and Retail Lumber Yard	1890
2195	Elmon Mercantile Co.	West Superior	Storage	1895
2196	Enterprise Laundry Co.	West Superior	Laundry	1897
2197	Evening Telegram Co.	West Superior	Publishers and Printers	1890
2198	Fitzsimmons-Derrig Co.	West Superior	Storage	1889
2199	Freeman Milling Co.	West Superior	Mfrs. of Flour	1894
2200	Gem Steam Laundry, The	West Superior	Laundry	1891
2201	Globe Elevator Co.	West Superior	Grain Elevator	1887
2202	Great Northern Bottling Works	West Superior	Mfrs. of Soda Water	1891
2203	Gregg, F. B.	West Superior	Publishers and Printers	1886
2204	Great Northern Elevator Co. The	West Superior	Grain Elevator	1886
2205	Gund, John, Brewing Co. of La Crosse	West Superior	Beer Storage Warehouse	1890
2206	Harmon-Whipple Co., The	West Superior	Printers	1892
2207	I. X. L. Roofing & Cornice Works	West Superior	Mfrs. of Cornice	1890
2208	Klinkert Brewing Co., The	West Superior	Mfrs. of Beer	1890
2209	Kloster & Lange	West Superior	Retail Lumber Yard	1896
2210	Lake Superior Fur Co.	West Superior	Mfrs. of Fur Garments	1894
2211	Lake Superior Supply Co.	West Superior	Retail Wood & Coal Yd.	1891
2212	Lehigh Coal & Coke Co.	West Superior	Coal and Coke	1886
2213	Lehigh Valley Coal Co., The	West Superior	Coal Dealers	1895
2214	Mankato Milling Co.	West Superior	Flour	1893
2215	Marx, Fred C.	West Superior	Cigars	1892
2216	Mast, R. C.	West Superior	Mfrs. of Books	1890
2217	McCord Lumber Co.	West Superior	Band Sawed Lumber	1896
2218	McDonlad & Taylor	West Superior	Mfrs. of Wagons	1891
2219	McKenzie, Arris	West Superior	Contractors	1892
2220	Miller, Fred, Brewing Co.	West Superior	Beer Storage	1883
2221	Middleton Mfg. Co.	West Superior	Publishers and Printers	....
2222	Neil & Co.	West Superior	Plumbers and Fitters	1889
2223	Northwestern Coal R'y Co.	West Superior	Storage and Handling of Coal	1895
2224	Northwestern Fuel Co., The	West Superior	Shippers of Coal	1888
2225	Northwestern Machine Works	West Superior	Machine Shop	1896
2226	Northwestern Pants Mfg. Co.	West Superior	Mfrs. of Pants	1897
2227	Ohio Coal Co.	West Superior	Dealers in Coal	1889
2228	Orenstein, James, & Co.	West Superior	Practical Furriers	1897

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2229	Penn, William, & Co.	West Superior	Cut Stone	1889
2230	Penn. Coal, Dray & Storage Co.	West Superior	Dray and Storage	1897
2231	Peyton, Kimball & Barber	West Superior	Mfrs. of Lumber	1884
2232	Phil. & Reading Coal & Iron Co.	West Superior	Dealers of Coal	1890
2233	Pioneer Carriage Co.	West Superior	Carriages and Repairing	1893
2234	Roberts, G. W.	West Superior	Sheet Iron Work	1889
2235	Rohl Bros.	West Superior	Bottlers of Water and Beer	1893
2236	Russell & Miller Milling Co.	West Superior	Mfrs. of Flour	1893
2237	Schmidt & Schaible	West Superior	Mfrs. of Cigars	1895
2238	Stack Bros.	West Superior	Plumbers	1892
2239	Strothman Iron Works	West Superior	Foundry, Machine Shop	1888
2240	Star Co-operative Barrel Co.	West Superior	Mfrs. of Barrels	1897
2241	Superior Broom Co.	West Superior	Mfrs. of Brooms	1892
2242	Standard Oil Co.	West Superior	Handling Oils	1889
2243	St. Paul & Western Coal Co.	West Superior	Coal Dealers	1888
2244	Superior Citizen, The	West Superior	Publishers and Printers	....
2245	Superior Creamery Co., The	West Superior	Creamery	1894
2246	Superior Cycle Co.	West Superior	Mfrs. of Bicycles	1896
2247	Superior Iron Works	West Superior	Foundry and Machinist	1896
2248	Superior Laundry	West Superior	Laundry	1891
2249	Superior Rapid Transit R'y Co.	West Superior	Street Railway	1889
2250	Superior Supply & Fuel Co.	West Superior	Building Material and Fuel	1892
2251	Superior Tidende, The	West Superior	Publishing and Printers	1892
2252	Superior Trunk & Harness Factory	West Superior	Mfrs. Trunks and Harness	1890
2253	Superior Warehouse Co.	West Superior	Freight and Storage	1893
2254	Superior Water, Light & Power Co.	West Superior	City Water and Light Supply	1887
2255	Swift & Co., Branch House	West Superior	Dealers in Meats	1893
2256	Tait Storage & Salt Co.	West Superior	Storage	1896
2257	Thompson, H. O.	West Superior	Mfrs. Harness	1888
2258	Twohy Mercantile Co.	West Superior	Mfrs. of Bluing	1889
2259	Walsh, W. P.	West Superior	General Contractor	1888
2260	Warehouse & Builders' Supply Co.	West Superior	Lime, Builders' Supplies	1889
2261	Wendland Bros.	West Superior	Sheet Iron Work	1897
2262	West Superior Bay Co.	West Superior	Mfrs. of Bags	1894
2263	West Superior Bedding Co.	West Superior	Mattresses, Pillows, Wire Springs	1897

2264	West Superior Brewing Co.	West Superior	Mfrs. of Beer	1889
2265	West Superior Iron & Steel Co.	West Superior	Iron and Steel	1888
2266	West Superior Lumber Co.	West Superior	Mfrs. Lumber	1890
2267	West Superior Wood Working Co.	West Superior	Mfrs. Sash and Doors	1890
2268	Whitney Bros.	West Superior	General Contractors	1891
2269	Youghiogheny & Lehigh Coal Co.	West Superior	Coal Dealers	1893
2270	Goodyear, P. A.	Tomah, Monroe Co.	Mfr. Lumber, Lath, Shingles	1894
2271	Bangor Lumber Company	Tomahawk	Mfrs. Lumber, Lath and Shingles	1897
2272	Bay Mill Company	Tomahawk	Mfrs. Lumber, Lath and Shingles	1892
2273	Bradley Company	Tomahawk	Planing Lumber	1896
2274	Crane Bros.	Tomahawk	Mfrs. Lumber	1890
2275	Packers Box Company	Tomahawk	Mfrs. Box Shooks	1895
2276	Rice Bros. Box Company	Tomahawk	Mfrs. Box Shooks	1897
2277	Rice River Lumber Company	Tomahawk	Dealers in Logs and Lumber	1892
2278	Somo Lumber Company	Tomahawk	Mfrs. Lumber	1889
2279	Tomahawk Iron Works	Tomahawk	Mfrs. Mill Machinery	....
2280	Tomahawk Pulp & Paper Company	Tomahawk	Mfrs. Pulp Paper	1888
2281	Lake Shore Lumber Co., The	Tomahawk Lake, Vilas	Lumber, Lath, Shingles	1892
2282	Bergand Madison Badger Lumber Co.	Tigerton, Shawano Co.	Mfrs. Lumber and Shingles	1894
2283	Tigerton Lumber Company	Tigerton, Shawano Co.	Mfrs. Lumber, Shingles	1892
2284	Wall & Spaulding	Tigerton, Shawano Co.	Mfr. Lumber	1884
2285	Aluminum Mfg. Co.	Two Rivers, Manitowoc	Mfg. Aluminum Combs	1895
2286	Eggers, F.	Two Rivers, Manitowoc	Mfg. Veneer Seating	1886
2287	Hamilton Mfg. Company	Two Rivers, Manitowoc	Mfg. Woodtype and Printers' Furniture	1881
2288	Mueller Bros.	Two Rivers, Manitowoc	Brewers and Maltsters	1848
2289	Schroeder Bros.	Two Rivers, Manitowoc	Mfg. Flour	1878
2290	Two Rivers Mfg. Company, No. 1	Two Rivers, Manitowoc	Mfr. Lumber and Wood Work for Pails	1855
2291	Two Rivers Mfg. Company, No. 2	Two Rivers, Manitowoc	Mfg. Pails and Tubs	1855
2292	Two Rivers Mfg. Company, No. 3	Two Rivers, Manitowoc	Mfg. Chairs	1855
2293	Union Panel Mfg. Company	Town of Union Pierce Co.	Mfr. of Rotary Cut Basswood	1892
2294	Veefkind Mfg. Co., Henry B.	Veefkind, Clark Co.	Mfrg. Staves and Heading	1891
2295	Rudesill Estate, Saw Mill	Viking P. O.	Mfrg. Hardwood Lumber	1883
2296	Vernon County Censor	Viroqua, Wis.	Edt. News Paper and Job Printing	1856
2297	Viroqua Steam Laundry	Viroqua	Laundry	1897
2298	Warren Company, George	Warren, Monroe Co.	Mfrs. Lumber, Lath, Window Frames	1868

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2299	Bigelow & Co., A. A.	Washburn, Bayfield Co.	Mfrg. Lumber, Lath and Shingles	1886
2300	Kenfield & Lamoreaux	Washburn, Bayfield Co.	Mfrs. Heading and Lumber and Shingles	1894
2301	Northwestern Fuel Company	Washburn, Bayfield Co.	Coal Dealers	1897
2302	Nye Jenks & Company	Washburn Bayfield Co.	Grain Elevators	1890
2303	South Shore Lumber Company	Washburn, Bayfield Co.	Mfrg. Lumber	1890
2304	Thompson Lumber Company	Washburn, Bayfield Co.	Mfrg. Lumber	1887
2305	C., St. P., M. & O. R'y	Washburn, Bayfield Co.	Storage	1890
2306	Roach & Seeber Company	Waterloo, Jefferson Co.	Mfrg. Butter, and Handle Grain	1884
2307	Rood & Son	Waterloo, Jefferson Co.	Feed Mill	1895
2308	Spies, John	Waterloo, Jefferson Co.	Mfrg. Pearl Buttons	1891
2309	Waterloo Monumental Works	Waterloo, Jefferson Co.	Granite and Marble Works	1895
2310	Badger State Bottling Company	Watertown, Jefferson Co.	Mfrg. Carbonated Beverages	1868
2311	Blessuns Table Slide Co., The	Watertown, Jefferson Co.	Mfrg. Table Covers	1889
2312	Edward Brandt & Dent. Co., The J.	Watertown, Jefferson Co.	Mfrg. Gas Fixtures	1890
2313	Bucheit Malting Co., Wm.	Watertown, Jefferson Co.	Malting	1889
2314	Cordes & Co., L. H.	Watertown, Jefferson Co.	Mfrg. Bricks	1882
2315	Eagle Mills	Watertown, Jefferson Co.	Flour and Feed	1881
2316	Farncrook, Jas.	Watertown, Jefferson Co.	Mfrg. Shipping Grates, Bee Hives	1881
2317	Fuermann Brewing Company	Watertown, Jefferson Co.	Brewers and Malsters	1849
2318	Gazette, The	Watertown, Jefferson Co.	Publishing and Printing	1854
2319	Globe Milling Co., Empire Mills	Watertown, Jefferson Co.	Flour and Feed	1871
2320	Hartig, Wm.	Watertown, Jefferson Co.	Brewers and Malsters	1884
2321	Kramer & Neuman	Watertown, Jefferson Co.	Mfrg. Cigars	1883
2322	Kunert Mfg. Co., The E.	Watertown, Jefferson Co.	Founders and Machinists	1875
2323	Lewis, G. B. Company	Watertown, Jefferson Co.	Mfrg. Bee Keepers Supplies	1869
2324	Miller, A. F.	Watertown, Jefferson Co.	Mfrg. Cigars	1861
2325	Missigates & Co., F.	Watertown, Jefferson Co.	Mfrg. Sash Door and Blinds	1895
2326	Quentmeyer & Vaugh	Watertown, Jefferson Co.	Mfrg. Brick	1881
2327	Schlueter Bros.	Watertown, Jefferson Co.	Mfrg. Cigars	1879
2328	Watertown Electric Light Co.	Watertown, Jefferson Co.	Electric Light for City	1889
2329	Watertown Gas Company	Watertown, Jefferson Co.	Gas for City	1858
2330	Watertown Mfrg. Company	Watertown, Jefferson Co.	Boiler, Foundry and Machine Shops	1888
2331	Watertown Republican	Watertown, Jefferson Co.	Publishing and Job Printing	1861
2332	Watertown Shoe Company	Watertown, Jefferson Co.	Mfrg. Shoes	1886

2333	Watertown Steam Laundry	Watertown, Jefferson Co	Laundry	1886
2334	Watertown Weldbuerger, German	Watertown, Jefferson Co	Publishing and Printing	1853
2335	Wiggenhorn Bros.	Watertown, Jefferson Co	Mfrg. Tobacco and Cigars	1858
2336	Welkowski Bros	Watertown, Jefferson Co	Mfrg. Cigars	1882
2337	Woodard & Stone	Watertown, Jefferson Co	Mfrg. Cracker and Confectionery	1867
2338	Empire Milling Company	Whitewater, Walworth Co	Mfrg. Flour and Feed	1852
2339	Klinger, N.	Whitewater, Walworth Co	Brewer	1864
2340	Waite, C. M.	Whitewater, Walworth Co	Mfrg. Sash, Doors and Blinds	1866
2341	Whitewater Electric Light Company	Whitewater, Walworth Co	Electric Light for City	1890
2342	Whitewater Register	Whitewater, Walworth Co	Publishing and Printing	1857
2343	Whitewater Robe Tanning Co	Whitewater, Walworth Co	Tan Hides for Garments	1896
2344	Whitewater Steam Laundry	Whitewater, Walworth Co	Laundry	1892
2345	Evans, J. W.	Waupaca, Waupaca Co	Mfrg. Woolen Cloths	1867
2346	Hansen, Andrew M.	Waupaca, Waupaca Co	Mfrg. Lumber	1893
2347	Nelson, A. G.	Waupaca, Waupaca Co	Planing Lumber, Sash	....
2348	Roberts & Oborn	Waupaca, Waupaca Co	Mfrgs. Flour and Feed	1884
2349	Rosche, T. W.	Waupaca, Waupaca Co	Foundry	1892
2350	Sheaver & Jardme	Waupaca, Waupaca Co	Planing Mill	1857
2351	Waupaca Electric Light Co	Waupaca, Waupaca Co	Electric Lighting	1886
2352	Waupaca City Water Works	Waupaca, Waupaca Co	City Water	1897
2353	Waupaca Post, The	Waupaca, Waupaca Co	Printers and Publishers	1874
2354	Waupaca Record	Waupaca, Waupaca Co	Publishers and Printers	1894
2355	Waupaca Starch and Potato Company	Waupaca, Waupaca Co	Mfrs. Starch	1890
2356	Waupaca Steam Laundry	Waupaca, Waupaca Co	Steam Laundry	1892
2357	Wells, Andrew S.	Waupaca, Waupaca Co	Mfrg. Feed	1891
2358	Althose, Wheeler & Company	Waupun	Mfrg. Wind Mills	1894
2359	Henry, Ira L.	Waupun	Mfrg. Paper Boxes and canes	1884
2360	Hinnis Markle & Company	Waupun	Mfrg. Flour and Feed	1870
2361	Maxon & Olds	Waupun	Mfrg. Cigars	1870
2362	Olson & Nelson	Waupun	Mfrg. Plows and Agri. Imp	1891
2363	Shaler Hartgernik Company	Waupun	Mfrg. Umbrellas and Canes	1892
2364	Zimmerman, F. F.	Waupun	Mfrg. Buggies, Carriages and Sleighs	1867
2365	Zoeller Bros. & Hull	Waupun	Mfrg. Flour and Feed	1890
2366	Wisconsin State Prison	Waupun	Clothing	1893
2367	Wells, M. D., & Co	Waupun	Shoe Uppers	1874
2368	Wells, M. D., & Co	Waupun	Boots and Shoes	1874
2369	State Prison	Waupun	Knitting	1893
2370	Morris, J. S.	Waupun	Carriages and Sleighs	1874

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2371	Waupun Leader	Waupun	Printing and Publishing	....
2372	Barker & Steward	Wausau, Marathon Co.	Lumber, Lath and Shingles	1886
2373	Brodie, James	Wausau, Marathon Co.	Tannery	1896
2374	Buller & Berkholder	Wausau, Marathon Co.	Cigars	1887
2375	Central Wisconsin, The	Wausau, Marathon Co.	Printers and Publishers	1857
2376	Curtis & Yale Co.	Wausau, Marathon Co.	Sash, Doors, Blinds, etc.	1881
2377	Daily Record, The	Wausau, Marathon Co.	Printers and Publishers	1876
2378	Fenzel, John A.	Wausau, Marathon Co.	Repairing Machinery	1877
2379	Goodwillis Bros. Co.	Wausau, Marathon Co.	Boxes and Box Shooks	1889
2380	Kickbusch Roller Flour Mills	Wausau, Marathon Co.	Flour and Feed	1885
2381	Kickbusch, F. W.	Wausau, Marathon Co.	Flour and Feed	1882
2382	Kryshak, A. L.	Wausau, Marathon Co.	Cigars	1891
2383	Lipman & Slimmer Co.	Wausau, Marathon Co.	Hardwood Lumber	1893
2384	Mathe Brewery	Wausau, Marathon Co.	Lager Beer	1869
2385	McEchron, H. E.	Wausau, Marathon Co.	Flour and Feed	1886
2386	Mortenson, J., Lumber Co.	Wausau, Marathon Co.	Lumber, Lath and Shingles	1892
2387	Murray, D. J., Mfg. Co.	Wausau, Marathon Co.	Machinery	1875
2388	Jawarth, Fred & Son	Wausau, Marathon Co.	Mfrs. Buggies, Sleighs, etc.	1872
2389	Ritter & Deutsch	Wausau, Marathon Co.	Office Fixt. and Furniture	1884
2390	Ruder, Geo., Brewing Co.	Wausau, Marathon Co.	Lager Beer	1860
2391	Schwentkofske, Aug.	Wausau, Marathon Co.	Carpenter and Builder	1897
2392	Steward, Alex., Lbr. Co.	Wausau, Marathon Co.	Lumber, Lath and Shingles	1884
2393	Underwood Veneer Co.	Wausau, Marathon Co.	Veneering	1893
2394	Wausau Box & Lbr. Co.	Wausau, Marathon Co.	Box Shooks	1892
2395	Wausau Boom Co.	Wausau, Marathon Co.	Handling Logs	1871
2396	Wausau Electric Co.	Wausau, Marathon Co.	Electric Lighting	1889
2397	Wausau Excelsior Co.	Wausau, Marathon Co.	Excelsior	1891
2398	Wausau Novelty Co.	Wausau, Marathon Co.	Furniture and Novelties	1896
2399	Wausau Herold, The	Wausau, Marathon Co.	Printers and Publishers	1893
2400	Wausau Pilot	Wausau, Marathon Co.	Printers and Publishers	1865
2401	Wausau Rolling Mills	Wausau, Marathon Co.	Flour and Feed	1893
2402	Wausau Water Works	Wausau, Marathon Co.	City Water Supply	1885
2403	Werheim Mfg. Co.	Wausau, Marathon Co.	Sash, Doors and Blinds	1884
2404	Wausau Wochenblatt	Wausau, Marathon Co.	Eng. and German Job Printing	1870

2405	Manson, R. P.	Wausau, Marathon Co.	Lumber and Shingles	1885
2406	Bird & Wells Lumber Co.	Wausaukee, Marinette Co.	Lumber, Lath and Shingles	1888
2407	Beldenville Lumber Co.	Waverly, Pierce Co.	Hardwood Lumber	1891
2408	Wagner, M. B.	Webber, Marathon Co.	Lumber	1883
2409	Krieger, Henry	West Bend, Washington Co.	Harness	1892
2410	Schmidt & Stark	West Bend, Washington Co.	Wagons, Spokes and Fellows	1892
2411	Silberzohn Mfg. Co.	West Bend, Washington Co.	Agricultural Implements	1879
2412	Silver Lake Ice Co.	West Bend, Washington Co.	Flour and Electric Light	1892
2413	Washington Co. Pub. Co.	West Bend, Washington Co.	Printing and Publishing	1853
2414	West Bend Brewing Co.	West Bend, Washington Co.	Beer and Malt	1882
2415	Mostal, Anton, & Co.	West Bend, Washington Co.	Pearl Buttons	1895
2416	Thorsen, Thos., & Co.	Westby	Planing, Lbr. and Feed	1885
2417	Baeton, John	West Depere, Brown Co.	Brick	1889
2418	Baeton, Leonard	West Depere, Brown Co.	Brick	1890
2419	Hoeker, John	West Depere, Brown Co.	Brick	1857
2420	Roofers, John	West Depere, Brown Co.	Brick	1887
2421	Laanen, Van, Arnold	West Depere, Brown Co.	Brick	1892
2422	Badger Basket Mfg. Co.	Weyauwega, Waupaca Co.	Baskets	1885
2423	Weed & Gumaer Mfg. Co.	Weyauwega, Waupaca Co.	Lumber	1855
2424	Weed & Gumaer Mfg. Co.	Weyauwega, Waupaca Co.	Flour and Feed	1855
2425	Weyauwega Elec. Light Co.	Weyauwega, Waupaca Co.	Light	1895
2426	Hull, G. F.	Whitcomb, Shawano Co.	Saw Mill	1895
2427	Whitcomb Lbr. Co.		Lumber	1885
2428	Wisconsin River Paper & Pulp Co.	Whiting, Portage County	Mfrg. News Paper	1891
2429	Plover Paper Company	Whiting, Portage County	Mfrg. Fine Writing Paper	1894
2430	Monford Saw Mill & Bending Wks., A. J.	Wildwood, Pierce County	Mfrgs. Lumber Wagons	1897
2431	Aggen, J. D.	Wittenberg, Shawano County	Flour and Feed	1887
2432	Gralley Herman F.	Three miles south of Wittenberg	Mfrg. Lumber and Planing Mill	1882
2433	Holmes & Smith	Wittenberg, Shawano County	Mfrg. Lumber	1887
2434	Shawano Lumber Company	Wittenberg, Shawano County	Mfrg. Lumber, Lath and Shingles	1881
2435	Wittenberg Veneer & Panel Co.	Wittenberg, Shawano County	Mfg. Veneer	1896
2436	Wood, Geo. E.	Woodboro, Oneida County	Mfrg. Lumber, Lath and Shingles	1892
2437	Bethesda Brewery	Waukesha, Waukesha Co.	Brewers Malsters and Bottlers	1864
2438	Almanaris Company, The	Waukesha, Waukesha Co.	Mfrg. Ginger Ale and Phosphate	1892

	Name of Firm.	Location.	Kind of Goods Made or Work Done.	Established.
2439	Bethesda Mineral Spring Co.	Waukesha, Waukesha Co.	Mfrg. Ginger Ale, Soda Water, etc.	1878
2440	Blair Bros.	Waukesha, Waukesha Co.	Founders and Machinists.	1886
2441	Dodd, Samuel	Waukesha, Waukesha Co.	Sash, Doors, Blinds and Contracting.	1870
2442	Henk Mineral Spring & Bottling Co.	Waukesha, Waukesha Co.	Mfrg. Ginger Ale and Bottlers.	1881
2443	Imperial Spring Brewing Co.	Waukesha, Waukesha Co.	Brewers and Bottlers	1893
2444	Kent Lubricant Company	Waukesha, Waukesha Co.	Mfrg. Grease	1892
2445	Silurian Mineral Spring Water.	Waukesha, Waukesha Co.	Mfrg. Ginger Ale, Cherry Phosphate.	1879
2446	Spring City Steam Laundry.	Waukesha, Waukesha Co.	Laundry	1894
2447	Waukesha American Gas Co.	Waukesha, Waukesha Co.	Light for City	1885
2448	Waukesha Arcadia Company, The.	Waukesha, Waukesha Co.	Ginger Ale and Cherry Phosphate.	1885
2449	Waukesha County Democrat, The.	Waukesha, Waukesha Co.	Publishing	1852
2450	Waukesha Dispatch, The.	Waukesha, Waukesha Co.	Publishing	1891
2451	Waukesha Electric Light Company.	Waukesha, Waukesha Co.	Lighting City	1886
2452	Waukesha Freeman, The.	Waukesha, Waukesha Co.	Publishing and Printing	1859
2453	Waukesha Hazel Pure Water Co.	Waukesha, Waukesha Co.	Manufacture Carbonated Water.	1897
2454	Waukesha Lithia Spring Co.	Waukesha, Waukesha Co.	Bottling Mineral Water	1892
2455	Waukesha Malleable Iron Works	Waukesha, Waukesha Co.	Mfrg. Malleable Iron Castings	1894
2456	Waukesha Mfrg. Company	Waukesha, Waukesha Co.	Mfrg. Weather Strips.	1894
2457	White Rock Mineral Spring Co.	Waukesha, Waukesha Co.	Bottles of Mineral Waters and Gin. Ale.	1884
2458	Waukesha Steam Laundry	Waukesha, Waukesha Co.	Laundry	1888
2459	Waukesha Water Co.	Waukesha, Waukesha Co.	Bottlers of Mineral Waters	1890
2460	Waukesha Water Works	Waukesha, Waukesha Co.	Supplying Water	1897
2461	Wisconsin Central Ry. Shops	Waukesha, Waukesha Co.	Car and Locomotive Mfrg.	1886
2462	Wauzeka Lumber Co.	Wauzeka	Excelsior	1890
2463	Wauzeka Lumber Co.	Wauzeka	Lumber	1890
2464	Wauzeka Roller Mills.	Wauzeka	Flour and Feed	1891

ORDERS ISSUED.

It was said in the beginning of this part that the duties coming under the term "Factory Inspection" really consist of enforcing the laws which regulates the condition in factories and workshops; that the work of inspection, while incidental to this is necessary in order to discover violations; and that the first step taken towards enforcing these laws consist of a formal notice or order to this effect, in which the nature of the violation as well as of the remedy to be applied are specified.

From February, 1897, to about September 1st, 1898, 844 such order were made. Most of these were readily complied with. Others will be complied with in the near future, and a few, in which our authority is disputed, will probably require further proceedings.

The above orders were issued in cases where the laws were directly violated. It should not be understood, however, that this is the only way in which greater safety to employees have been brought about through the factory inspectors. There are many factories and work shops in which the condition as a whole or part is such that while it is a menace to the health and safety of the employees it does notcome within any of the provisions of the factory laws. In such cases the inspectors have, of course, no authority to act or to compel changes. By calling the operator's attention to the condition and suggesting remedies the inspectors often succeed in bringing about improvements of the greatest value to the health and safety of the operators. There are also many other ways in which the inspectors have been of great service outside of what, strictly speaking, may be termed their regular duties. While all work of this nature is fully reported to this Bureau and a part of its record, it does not come within the factory laws and is therefore excluded in this report.

The orders thus made for improvements in the condition in factories and workshops are presented with considerable detail in the following pages. The number given opposite each order indicate the establishment which it effects. Thus, if in reading the orders, one wishes to find the establishment on which it was made, all that is necessary to do is to turn to the same number in the "Index to Establishments" and there read the name of the establishment in question. This arrangement was made in order to save space or the duplication of names.

While an attempt has been made in the following table to classify the orders according to their nature, or, the purpose for which they were issued, this classification is not in all cases complete. This is because of the character of this work. In many cases, for instance, guards, which are mainly intended as a protection against some one dangerous part of a machine and so classified, also serve the same purpose for other parts, which while dangerous, are not specified. On the whole, however, the classification as it stands gives a fairly accurate idea of the character of the changes or improvements ordered.

CLASSIFICATION OF ORDERS MADE.

Classification.	Number of orders.
Safety Guards on Flywheels	192
Safety Guards on Edge Saws	9
Safety Guards on Band Saws	9
Safety Guards on Shaftings	9
Safety Guards on Pulleys	65
Safety Guards on Gearings	43
Safety Guards on Set Screws	29
Safety Guards on Bearings	85
Safety Guards on Machinery	46
Safety Guards on Stairways	32
Safety Guards on Floor Openings	12
Safety Guards on Elevators	26
Connections between engine room and shop	41
Doors to swing out	6
Children under 14 years of age	150
Fire escapes	26
Miscellaneous	64
Total	844

This table shows that in all 844 orders were issued. Of these 528 or 62.46 per cent. were for safety guards of one kind or another on machinery or parts thereof; 150 or 17.70 per cent were for the discharge of children which had been found to be under 14 year of age; 76 or 9.04 per cent were for guards on stairs, elevators and other openings; 64 or 7.72 per cent were for changes which could not be conveniently classified and therefore called miscellaneous; and 26 orders or a trifle over 3 per cent. of the whole were for fire escapes.

Many of these orders, however, represent more than one appliance or change. It often happened that in the same establishment separate guards or appliances were needed for several pieces of machinery of the same kind. While this simply amounted to that many changes, they were all included in one order and therefore counted as one order only in the above table. Instances of this kind are found in each case or class. Thus the 192 orders issued for the guarding of fly wheels provide for guards for over three hundred such wheels. Another example may be found in the case of children. While in this case only 150 orders are shown, these ordered the dismissal from work of 327 children who were under 14 years of age. The number of safety appliances provided or the number of cases in which operators have been made to comply with the factory laws are therefore much greater than the number of the orders issued.

Orders for changes or improvements on churches, school houses, halls, etc., are in each case shown in connection with the report of their inspection.

9 One child under age discharged. Complied with.
16 Three children under age discharged. Complied with.
20 Four children under age discharged. Complied with.
27 Three children under age discharged. Complied with.
32 Doors swing out. One child under age discharged.
42 One child under age discharged. Complied with.
49 Band saw boxed. Complied with.
53 One child under age discharged. Complied with.
103 One child under age discharged. Complied with.
98 One child under age discharged. Complied with.
107 Five children under age discharged. Complied with.
122 Doors swing outward, fire escape. One child under age discharged.
147 One child under age discharged. Complied with.
156 One child under age discharged. Complied with.
161 One child under age discharged. Complied with.
171 Twelve children under age discharged. Complied with.
196 One child under age discharged. Complied with.
223 One child under age discharged. Complied with.
229 One child under age discharged. Complied with.
234 Fly wheel guarded. Complied with.
246 One child under age discharged. Complied with.
252 One child under age discharged. Complied with.
259 Boy discharged. Complied with.
271 One child under age discharged. Complied with.
277 Four children under age discharged. Complied with.
293 Band saw boxed. Complied with.
296 Fire escape. Complied with.
300 Three children under age discharged. Complied with.
315 Fire escapes. Two children under age discharged.
320 Two fire escapes and fly wheel guarded. Complied with.
318 Band saw and drive belt boxed and hole covered. Complied with.
317 Eight children under age discharged. Complied with.

319 Two children under age discharged. Complied with.
330 New guard for fly wheel. Complied with.
331 Doors swing out, elevator shaft guarded; hand rails on stairways. Complied with.
349 Three children under age discharged. Complied with.
361 Two boys discharged. One child under age discharged. Complied with.
375 One child under age discharged. Complied with.
388 One child under age discharged. Complied with.
390 One child under age discharged. Complied with.
401 Two children under age discharged. Complied with.
404 One child under age discharged. Complied with.
433 One child under age discharged. Complied with.
438 Fire escapes.
438 Split saw boxed.
449 Hand rails. Complied with.
454 Wire netting to fence fly wheel.
462 Seven children under age discharged. Complied with.
464 Four children under age discharged. Complied with.
488 Three children under age discharged. Complied with.
508 Fence fly wheel, guard elevator shaft.
509 Band saws boxed.
518 Suggested ventilator in center of shop in shape of funnel with pipe out of roof. Complied with.
518 Two children under age discharged. Complied with.
519 One child under age discharged. Complied with.
520 Doors to swing out.
532 One child under age discharged. Complied with.
535 Fire escapes. Three children under age discharged.
539 Drive belt boxed. Complied with. Two children under age discharged.
549 One child under age discharged. Complied with.
560 Four children under age discharged. Complied with.
571 Two children under age discharged. Complied with.
590 Fire escape. Removed.
590 Fence fly and wheel and belt on engine.
591 One child under age discharged. Complied with.
600 Fly and balance wheels fenced. Complied with.
604 Four children under age discharged. Complied with.
616 One child under age discharged. Complied with.
678 Fly wheel, lumber conveyor and pulley guarded. Complied with.
681 Fly wheel and main belt guarded and connections from engine room to mill. Complied with.
759 Front end of all machines guarded.
665 Main drive belt boxed. Complied with.
657 All live gears covered, large gear in saw mill covered, fly wheel guarded. Complied with.
653 Child under age discharged. Complied with.
647 Two fly wheels on engine guarded. Complied with.
672 Fly wheel fenced. Complied with.
687 Fly wheel guarded.
688 Two fly wheels guarded and four fly wheels to small engine guarded.
690 Connection from engine room to work shop, fly wheel and pulley guarded.
696 Connecting rod to No. 2 engine, main belt and large pulley guarded. Complied with.
699 New stairs, fly wheel guarded.
697 Railing on log slide and fly wheel guarded.
700 South end of fly wheel guarded, railing on stairs used for oiling, railing on log slide. Complied with.
704 Fly wheel boxed, end of fly wheel shaft boxed, end of surfacers guarded, planer and matching machine guarded and also pulleys and belts.
705 Fly wheel and pulley guarded, gearing boxed, set screws covered, railing on log slide, guard on edger.
706 Belt to band saw guarded.

710 One child under age discharged. Complied with.
722 Fly wheel fenced. Complied with.
749 Two children under age discharged. Complied with.
751 Band saw boxed. Complied with.
756 Railing on log slide, counter shaft guarded.
760 Connections from boiler room and engine to wash house. Complied with.
789 Fly wheel fenced.
890 Fly wheel and drive belt fenced.
825 Main belt guarded. Complied with.
829 Fly wheel fenced, signal for engine room. Complied with.
840 Railing around engine. Complied with.
842 Fly wheel, elevator guards and engine room signals. Complied with.
763 Connection from engine room to machine shops. Complied with.
764 Fly wheel guarded. Complied with.
775 Child under age discharged.
777 Fly and balance wheel fenced. Complied with.
793 Fly wheel and pulley fenced. Complied with.
802 Four pulleys on grind stone fenced. Complied with.
824 Fly wheel and large gear boxed, gears to live rolls boxed, set screws and couplings boxed; bull wheel and pulleys to bull wheel covered, pulleys to carriage boxed, rope and gears to saw trimmers boxed, gear to sawdust conveyor boxed and ordered elbow put on exhaust pipe. Complied with.
844 Balance wheel on engine fenced. Complied with.
845 Fly and balance wheel fenced.
850 Fly wheel fenced and holes in second story floor fenced. Complied with.
851 Railing in front of fly wheel, guards on moulding machines, guards on counter shaft. Complied with.
856 Fly wheel fenced. Complied with.
864 Fly wheel fenced. Complied with.
870 Pulleys and belts boxed, gear to sticker machine guarded.
880 Fly wheel and sides fenced. Complied with.
907 Four children under age discharged.
913 Fly wheel guarded. Complied with.
919 Stair openings guarded.
926 Railing on 2nd and 3rd floor to elevator, lower end of band saw boxed, belt on second floor guarded, new stairway with railing to engine room, fly wheel and connecting rod to engine guarded, connection from engine room to work shop. Complied with.
930 Drive belt fenced, hand rail on stairs. Complied with.
941 Front end of all machines covered in planing mill, set screws covered, main belt and pulley guarded in engine room. Complied with.
943 Fly wheel guarded. Complied with.
944 Fly wheel guarded.
945 Fly wheel guarded and two boys under age discharged.
946 Fly wheel guarded and band saw boxed.
949 Fly wheel fenced. Complied with.
955 Fly wheel and belt fenced. Complied with.
965 One child under age discharged. Complied with.
966 Railing on stairway, gear to rollers, saw to butting machine guarded, pulley to feed gear covered, wheel on edger boxed, belt to bull wheel boxed. Complied with.
967 Railing on lower floor of water mill. Complied with.
968 Front end of all machines in planing mill covered, arm of engine guarded.
972 Gears to saw dust elevators covered, rotary saw guarded, bull wheels guarded, front end of five machines guarded and pulleys boxed.
981 Two nuts on molding machine covered, two on matcher covered, two fly wheels and connecting rod guarded, connection from engine room to work shop. Complied with.
984 Fly wheel guarded. Complied with.
987 Shafting covered. Complied with.
991 Gear to water wheel covered. Complied with.
996 Automatic gates on elevator. Complied with.

997 Fly wheel and two gears guarded. Complied with.

999 Set screws on pony planer boxed, slasher saws guarded, gear to Duplex machine guarded, gears to printing press and hopping machine guarded, two children under age discharged. Complied with.

1000 Fly wheels and belt guarded, floor openings fenced. Complied with.

1004 Gear to gang rip saw covered, gear to resaw guarded, belt on elevator gear covered and railing placed around friction pulley, connection from engine room to mill. Complied with.

1005 Two children under age discharged. Complied with.

1009 Connection rod on engine guarded, set screws to moulding machines covered, front end of moulding machines guarded, planer and loading shaft guarded. Complied with.

1010 End of fly wheel guarded, side of line shaft guarded, hole in floor guarded, new board placed in grove of cutoff, saw friction pulleys guarded, new box for chain to wood saw, all set keys covered. Complied with.

1011 Railing repaired, new steps, edging slasher guarded. One child under age discharged. Complied with.

1014 Fly wheel guarded, connection from engine room to factory. Complied with.

1016 Fly wheel fenced. Complied with.

1017 Fly wheel and pulley fenced. Complied with.

1018 Fly wheel fenced. Complied with.

1023 Fly wheels fenced, keys on shafting boxed, all drive belts and pulleys on planer guarded. Destroyed by fire.

1026 Fly wheel and pulleys guarded.

1028 Fly wheel and balance wheel fenced.

1032 Fly wheel guarded. Complied with.

1036 Fly wheel and pulley guarded, fly wheel of main engine guarded, drive wheel and pulley to veneer machine guarded. Complied with.

1037 Pulley boxed on circular saw, fly wheel guarded. Complied with.

1038 Boy discharged under age. Complied with.

1046 Fly wheel and top of trimmer saw guarded, railing on log slide, set screws covered, front end of all machines guarded. Complied with.

1047 Fly wheel guarded.

1048 Fly wheel guarded.

1075 Bars for elevator on lower floor. One child under age discharged. Complied with.

1083 Iron fire escape. Complied with.

1095 Gears to five bolting rolls guarded, gears to three case middling purifiers guarded, railing to runway fenced, large pulleys to feed rolls guarded. Complied with.

1161 Balance wheel and belt pulley guarded, six boys under age discharged. Complied with.

1162 Main belt boxed, fly wheel guarded. Complied with.

1163 Front end of planer guarded, fly wheel guarded. Destroyed by fire.

1164 Fly wheel guarded, rip saw boxed, railing on log slide. Complied with.

1165 Three boys under age discharged, keys to pulleys covered, gear to large roll covered, trimmer saw guarded. Complied with.

1169 Fly wheel and large belt guarded.

1103 Fly wheel fenced and fire escapes.

1111 Feed wheel, pulley and belt to resaw, pulley to molding, flooring and belt to planer in planing mill guarded.

1110 Fly wheel, pulley, bevel, friction set screws and main belt in saw mill guarded.

1118 Pulleys to dynamos and four driving pulleys to electric engine guarded.

1133 Arm of engine guarded.

1112 Fire escapes.

1140 Fire escapes on factory and warehouse. Fifteen children under age discharged.

1141 Guard fly wheel, bell connections to engine room. Complied with. Three children under age discharged.

1147 Three children under age discharged. Complied with.

1148 Pulleys, set screws, drive pulleys and belts guarded. Two children under age discharged.

1179 Gear on log carriage covered, fly wheel guarded, main belt boxed. Complied with.

1180 Front end and pulleys to three matchers guarded, set screws on main shaft guarded, two fly wheels and main belts guarded. Complied with.

1183 Railing on log slide, drive chain covered, fly wheel guarded, set screws covered, gears to all machines covered.

1185 Two boys under age discharged.

1200 Gear to planer shaper covered, belt and pulley to band saw boxed, counter shaft on molding machine covered, gears to sanding machine covered, belt boxed, counter shaft to rip saw boxed, C shaft to dove tailing machine boxed, connection from engine room to factory, automatic doors to elevator. Complied with.

1211 Fly wheel and connecting rod guarded. Complied with.

1214 Railing on log slide, cog wheel that runs band saw guarded, front end of all machines guarded. Complied with.

1215 Railing on outside stairway, fly wheel guarded, gear covered, set screws covered; gear to sticker machine, gear to veneer machine covered, gear to small planer covered, guard friction pulley on line shaft, guard 2 main belts in engine room. Complied with. Eighteen children under age discharged.

1227 Three children under age discharged. Complied with.

1230 Communication between each room where machinery is placed and engineer's room, auto. bars on lower floor and at end of bridge. Complied with.

1238 Bars on elevator.

1239 Connections to engine room, fly wheel guarded. Complied with.

1240 One child under age discharged. Complied with.

1246 Bars on wells and elevator shaft. Complied with.

1270 Fly wheel fenced, drive belt boxed, hand rails on stairs. Complied with.

1307 One child under age discharged. Complied with.

1299. Two fire escapes. Five children under age discharged.

1291 Fire escape. Three children under age discharged.

1288 Four fire escapes.

1303 Guard on fly wheel. Complied with.

1293 Connections from engine to factory. Complied with.

1295 Connections from engine room to factory. Complied with.

1277 Drive belt boxed. Complied with.

1311 Fly wheel fenced. Complied with.

1315 Fly wheel fenced, drive belt boxed, pulley on sanding machine guarded. Complied with.

1318 Drive belt boxed, hand rail on two stairs, openings guarded, elevator shaft guarded. Complied with.

1319 Drive belt and pulleys boxed, two boys under age discharged, joiner guarded. Complied with.

1321 Front end of all machines and also fly wheel guarded. Complied with.

1338 Guide pulley guarded. Complied with.

1347 Three children under age discharged. Complied with.

1356 Fly wheel and drive wheel guarded. Complied with.

1367 One child under age discharged. Complied with.

1371 Two children under age discharged. Complied with.

1385 One child under age discharged. Complied with.

1387 One child under age discharged. Complied with.

1392 Railing. Complied with.

1392 Fly wheel guarded, in planing mill and also in machine shop.

1394 Bars on elevator. Complied with.

1397 One child under age discharged. Complied with.

1403 Arm of engine guarded. Complied with.

1412 Fly wheel and belt guarded and bell connection with engine room. Complied with.

1323 Drive belt and pulleys boxed. Complied with.

1415 Two boys under age discharged. Complied with.

1418 Fly wheel guarded.

1425 Fly wheel guarded.

1426 Back end of molder, head sticker and planer guarded, connection from engine room to workshop. Complied with.
1429 One boy under age discharged. Complied with.
1433 Connections from engine room to workshop. Complied with.
1440 Doors swing out.
1441 One boy under age discharged. Complied with.
1445 Molding machine guarded, connection from engine room to workshop.
1448 Single head sticker and molding machine guarded, connection from engine room to workshop.
1453 Pulley to gas engine guarded. Complied with.
1456 Fly wheel and belt boxed, gears and belt to feed mill covered. Complied with.
1457 End of molding and matching machine guarded, all gearing covered, belt to shingle saw covered. Complied with.
1458 Drive belt and pulleys boxed. Complied with.
1467 Fly wheel fenced and band saw boxed. Complied with.
1523 Fly wheel fenced. Complied with.
1525 Fly wheel fenced. Complied with.
1527 Fly wheel guarded.
1529 Fly wheel and connecting rod guarded. Complied with.
1531 Pulley to engine guarded.
1537 Connection from engine room to factory. Complied with.
1552 Elevator, pulleys, belts guarded. Complied with.
1564 Main belt and two fly wheels guarded. Complied with.
1567 Drive belt boxed and fly wheel guarded. Destroyed by fire.
1568 Two balance wheels guarded, connection from workshop to engine room, main belt boxed, all gears in bark mill covered, main belt and pulley guarded, railing on log side, pulley to sawdust conveyor boxed, gear to log roller guarded. Complied with.
1570 Drive belt and fly wheel guarded. Complied with.
1589 Two fly wheels guarded, main belt boxed, all set screws covered, back end of planer and matcher boxed.
1590 Fly wheel guarded. Complied with.
1591 Gearing covered. Complied with.
1593 Connection rod guarded, guard placed between pug mill and brick machines, set screws covered. Complied with.
1597 Fly wheel guarded. Complied with.
1599 One child under age discharged. Complied with.
1603 Railing on engine, two drive belts guarded, boy under age discharged. Complied with.
1604 One child under age discharged. Complied with.
1647 Fly wheel, main belt and planer guarded, steps on inside ladder. Complied with.
1684 Three drive belts boxed. Complied with.
1685 Two pulleys guarded. Complied with.
1691 All drive belts boxed. Complied with.
1696 Fly wheel guarded, set screw on shafting covered, gear to sticker machine covered. Complied with.
1713 Front end of all machines guarded, two fly wheels guarded, pulley and belt guarded, gears to lumber rolls guarded, railing on log slide. Complied with.
1714 Railing on runway. Complied with.
1716 All set screws and couplings covered, all bevel gears guarded, 12 gears to reel drive guarded.
1719 Railing around fly wheel.
1725 One child under age discharged. Complied with.
1731 Bell connections from factory to engine room. Complied with.
1732 Fly wheel guarded.
1736 Six children under age discharged. Complied with.
1740 One child under age discharged. Complied with.
1743 One child under age discharged. Complied with.
1746 Fly wheel guarded. Complied with.

1753 Guard around fly wheel, railing on stairways. Complied with.

1754 Two iron fire escapes. Two children under age discharged.

1766 Hand rails on inside stairways. Complied with.

1769. Railing around arm of engine, hand rail on outside stairs. Complied with. Seven children under age discharged.

1774 One child under age discharged. Complied with.

1778 Alarm bell connections, two fire escapes, guard around fly wheel. Two children under age discharged. Complied with.

1779. Fly wheel guarded. Complied with.

1784 Hand rails on stairs. Complied with.

1782 Two iron fire escapes, alarm bell connections.

1785 Railing around arm of engine and on outside stairs. Complied with.

1795 Two fly wheels guarded. Complied with.

1806 Fly wheel guarded, all gears to bark mill guarded. Complied with.

1821 Railing on top of stairs, two new steps, fly wheel guarded. Complied with.

1822 Main belt boxed. Complied with.

1831 Fly wheel fenced. Complied with.

1834 Cut off saw boxed, fly wheel guarded, connections from engine room to factory. Complied with.

1836 Fly wheels guarded, two set screws on shaft guarded, friction on log flip guarded, drive wheel guarded, two set collars on shaft guarded, gear wheels to trimmer guarded, new board on table to edger saw, set screw on shaft to corn sheller guarded, fly wheel guarded, set screw on counter shaft guarded, large pulley guarded, railing on gear to feed mill, drive belt that runs gear shaft guarded, railings on two stairs, railing on log slide, extend log walk at end of mill. Complied with.

1840 Fly wheel guarded. Complied with.

1847 One child under age discharged. Complied with.

1851 Hand rails on stairs. Complied with.

1852 Hand rails on stairs, stair openings guarded. Complied with.

1867 Fly wheel fenced.

1868 Fly wheel fenced.

1881 Fly wheel guarded. Complied with.

1884 Two children under age discharged. Complied with.

1892 Dust collector. Complied with.

1893 Fly wheel and connecting rod guarded, belt boxed in Baker Bld. Fly wheel and connecting rod guarded in Bld. A. Two fly wheels guarded and railing over belt in Bld. B.

1894 Railing around fly wheel.

1896 One child under age discharged. Complied with.

1898 Fly wheel guarded, bars to elevator kept in place. Complied with.

1900 Arm of engine guarded, railing to stairway repaired, doors to elevator closed, belt on planer boxed. Complied with.

1903 Guard placed around crank of engine, gates on elevators, guard around 4-headed sticker, new stairs on frame building in yard. One child under age discharged.

1904 Fly wheel guarded. Complied with.

1906 Connecting rod and fly wheel guarded. One child under age discharged. Complied with.

1910 Fly wheel guarded and engine connection. One child under age discharged.

1911 Fire escape. One child under age discharged.

1913 One child under age discharged. Complied with.

1916 Engine guarded. Complied with.

1917 Fly wheel guarded. Complied with.

1920 One child under age discharged. Complied with.

1921 Railing on stairs, fly wheel guarded, new stairways. Complied with.

1923 Fire escape, doors swing out. Three children under age discharged. Complied with.

1924 One child under age discharged. Complied with.

1925 Connections from engine room to factory. Complied with.

1926 Fly wheel guarded. Complied with.

1927 Fly wheel guarded. Complied with.

1938 Auto. gates, fly wheel guarded, one child under age discharged.

1942 Fly wheel guarded and connection between engine room and factory. Complied with.
1930 Bars on elevator. Complied with. Two children under age discharged.
1931 Fly wheel guarded.
1934 Fly wheel guarded. Complied with. Three children under age discharged.
1935 Iron fire escapes. Complied with. Five children under age discharged.
1936 One child under age discharged. Complied with.
1944 Belt boxed. Complied with. Two children under age discharged.
1945 Connections from engine room to factory, hand rail on outside stairs. Complied with.
1947 Connections from engine room to factory. Complied with. Fire escapes, one child under age discharged.
1949 Bars on elevator openings. Complied with.
1953 Connections from engine room to factory. Complied with.
1954 Fly wheel guarded. Complied with.
1960 Fly wheel guarded. Complied with.
1963 Fly wheel guarded. Complied with.
1967 Fly wheel guarded, connection from engine room to work shop. Complied with. Fly wheel fenced, hole in floor fenced. Complied with.
1977 Boy under age discharged. Complied with.
1982 Main belt and connecting rod guarded. Complied with.
1988 Fly wheel guarded, front end of planers guarded, connection from engine room to planing mill. Destroyed by fire.
1989 Balance wheel and gearing guarded. Complied with.
1990 Fly wheel and main belt guarded.
1995 Railings on inside stairs, rip saw guarded. Complied with.
1996 One child under age discharged. Complied with.
2004 Two children under age discharged. Complied with.
2007 Four children under age discharged. Complied with.
2013 Connections from engine room to factory.
2014 Fly wheel guarded, main belt boxed, holes in floor covered. Complied with.
2015 Fly wheel guarded, main drive belt and cut-off saw guarded. Complied with.
2023 Fly wheel and drive belt fenced.
2035 Fly wheel guarded, cut-off saw boxed. Complied with.
2037 Fly wheel and connecting rod guarded, center holder to main shaft guarded, two planer pulley and rip saw more securely fastened and protected. Complied with.
2046 Fly wheel and arm of engine guarded, bars on elevator. Complied with.
2047 Fire escape. Railing around arm of engine. Seven children under age discharged.
2052 One child under age discharged. Complied with.
2055 Two children under age discharged. Complied with.
2060 Two fire escapes. Complied with. Five children under age discharged.
2060 Gates to elevator repaired.
2064 Fly wheel guarded. Complied with.
2068 Six children under age discharged. Complied with.
2075 Fly wheel guarded. Complied with.
2076 Three children under age discharged. Complied with.
2077 Four children under age discharged. Complied with.
2081 Three children under age discharged. Complied with.
2089 New bar on lower floor for elevator. Complied with. Fire escape.
2078 Railings. Complied with.
2091 New cable on elevator, railing around elevator, fly wheel guarded. Complied with. One child under age discharged.
2099 Fly wheel guarded. Complied with.
2093 Bars on elevator, railing near arm of engine. Complied with.
2145 Fly wheel fenced; pulley and belt guarded.
2146 Fly wheel guarded. Complied with.
2149 Fly wheel fenced. Complied with.
2042 Fly wheel fenced. Complied with.
2101 Large fly wheel guarded, set screws covered, all gears on planer guarded, also on matcher, fly wheel in pump house guarded, fly wheel in south engine in power house guarded. Complied with.

2105 Belt guarded, connections engine room to factory, railing for straw pit, cables oiled, elevator well guarded, railings in bleaching room. Complied with.

2106 Engine connection to all parts of building. Complied with.

2107 Fly wheel guarded.

2108 Two fly wheels guarded, connections from engine room to factory. Complied with.

2111 Boy under age discharged. Complied with.

2113 Two fly wheels guarded, main belt, pulley to bark mill, and pulley to pump guarded. Complied with.

2116 Fly wheel and connecting rod guarded, connections from engine room to mill. Out of business.

2118 Fly wheel, main belt, pulley and front end of planer guarded.

2119 Boy under age discharged. Complied with.

2131 Fly wheel, end of planer, band saw, and pulley to sash jointer guarded; belt to planer lowered. Complied with.

2132 Fly wheel, front end of all matching machines and front end of planer guarded.

2139 Two fly wheels guarded. Complied with.

2164 Five gears on 3rd floor guarded, also gears on 5th floor, belt tightened on 6th floor and fly wheel, pulleys and belt to electric engine. Complied with.

2166 Fire escape on elevator. Complied with.

2168 Six boys under age discharged. Complied with.

2212 Fly wheel boxed in coke engine room. Complied with.

2176 Six children under age discharged. Complied with.

2179 Fly wheel and pulley on main belt in engine room guarded. Complied with.

2188 Spur gear guarded, and bevel gear to flour conveyor covered, set screws on conveyor shaft covered. Complied with.

2189 Main belt boxed and front end of planer guarded.

2190 Five boys under age discharged. Complied with.

2173 Three boys under age discharged, set screws covered; sanding machines, rear end of planer, rip saw pulley and rear end of matcher guarded. Complied with. One boy under age discharged.

2199 Driving gear on 5th floor covered, also conveyor gear on 5th floor, reel driver on 5th floor, Wonder wheel on 6th floor, set screws on break scalper, gear on car puller guarded. Complied with.

2213 Large fly wheels guarded. 2 rope drives in engine room 2 and 3 guarded, two pulleys and connecting rod engine No. 1 guarded, south and north side of rope haulage engine and retail hoisting engine guarded. Complied with.

2214 Fly wheel and gearing guarded, extend platform on 1st floor used for oiling gear and put railing around the same in the elevator. Complied with.

2217 Guard large gear that drives edger on south side, also large main belt on south side, railing on log side, cover gear to tail end of live roll. Complied with.

2225 Railing on fly wheel. Complied with.

2231 Main belt guarded, large friction pulley guarded, all set screws covered, large pulley that runs circular saw guarded, railing on slide. Complied with.

2236 All gearing to flour rolls, drive wheels and pulleys guarded; hole in floor fenced, large wheel on attic floor guarded. Complied with.

2239 Fly wheel guarded, also pulley to engine. Complied with.

2243 Large fly wheel boxed. Complied with.

2247 Set screws on shafting 2nd floor guarded, lower pulley to band saw 2nd floor boxed, fly wheel to gas engine guarded, cover all set screws on line . shaft. Complied with.

2174 Set screws on shafting guarded, gearing covered, railing extended around fly wheel. Six boys and four girls under age discharged. Complied with.

2262 Boy under age discharged. Complied with.

2271 Rear of lath machines guarded. Complied with.

2273 Caps over drive belt covered, opening in floor fenced. Complied with.

2277 Boy under age discharged. Complied with.

2281 Two fly wheels, main belt, key on line shaft and feed pulley guarded. Complied with.

2293 Set screws on shafting covered, connecting rod of engine guarded, connections from engine to factory.

2294 Fly wheel and pulley guarded, and walk repaired near fly wheel. Complied with.

2295 Fly wheel guarded.

2298 One child under age discharged. Complied with.

2299 Fly wheel and connection to engine of shingle mill guarded, bull wheel to draw saw boxed, pulley to drag saw covered, bolting saw guarded, belt to bolting saw guarded, counter shaft guarded, pulley on bolting saw boxed, set screws to edger covered, gear to counter shaft covered, set screws to line shaft covered, large wheel guarded, main belt to gang saw guarded, main belt boxed, fly wheel guarded. Complied with.

2300 Fly wheel and front end of sticker guarded, belt boxed. Complied with. Two children under age discharged.

2303 End of pulleys, two fly wheels, main belt and connecting rod guarded and gear to live roll boxed. Complied with.

2304 Both sides of fly wheel and connecting rod guarded, belt to shingle saw boxed, set screws on shaft covered. Complied with.

2367 Doors swing out, fans.

2373 Hole in floor fenced. Complied with.

2381 Pulley and cog wheels covered, hole in floor fenced. Complied with.

2386 Belt and pulley on shingle machine guarded. Complied with.

2393 Two children under age discharged. Complied with.

2394 Pulley boxed, belt lowered and cog wheels covered. Complied with. Six children under age discharged.

2397 Five floor openings fenced. Complied with.

2398 Two children under age discharged. Complied with.

2407 Gears to log carriers boxed, end of carriage, drive pulleys and fly wheel guarded; set screws on board machine covered, all set screws on shafting covered, connection from engine room to mill, belt on fly wheel guarded, couplings on shafting guarded, two large set screws covered, also gear wheels and set screws to drive saw. Complied with.

2417 Boy under age discharged. Complied with.

2421 Two boys under age discharged. Complied with.

2423 Gear to water wheel boxed, back end of molder and planer machines guarded, hand railing on stairs. Complied with.

2430 Pulleys guarded and sled stock that drives planer, hole covered, railing around elevator, belt boxed on splitting machine.

2435 Fly wheel and drive belt boxed. Complied with.

2437 Two boys under age discharged. Complied with.

2438 Fly wheel guarded. Complied with.

2456 Two boys under age discharged. Complied with.

Fond du Lac—Fitzgerald Blacksmith. One child under age discharged. Complied with.

Centralia—Overbeck Bros. Mfg. Co. One child under age discharged. Complied with.

Green Bay—J. W. Johann. Pulleys and belt to planer guarded.

Green Bay—Green Bay Cracker & Candy Co. Fire escapes.

Green Bay—Streckenback & Co. Three children under age discharged. Complied with.

Kenosha—John Schmitz. One child under age discharged. Complied with.

Milwaukee—Western Mall. & Grey Iron Co. Box drive belt.

Milwaukee—C. L. Jacobs & Son. One child under age discharged. Complied with.

Milwaukee—Interior Woodwork Co. One child under age discharged. Complied with.

Milwaukee—Filbert Co., A. J. Fire escapes. Complied with.

Porters Mills—Anderson & Co. One child under age discharged. Complied with.

Porters Mills—Sherwood Mfg. Co. Three children under age discharged. Complied with.

Stoughton—C. G. Johnson. Fly wheel and drive belt guarded. Complied with.

Algoma—Gablowsky Co. Gearing on shaper, sticker, planer and turning machine boxed. Complied with.

Marathon City—Bohman & Graube. Drive wheel fenced. Complied with.

From February, 1897, to September, 1898, the inspectors reported 62 accidents occurring in 49 factories. Of this number ten proved fatal and the others were classified as follows: injuries to the body 2; hand or arm 35; foot or leg 9, and miscellaneous 6. Some difficulty was experienced in securing accurate and complete reports on accidents as the manufacturers were somewhat reluctant to give information on this subject for fear it would reflect on their management or factory. It will be noticed that a large percentage of the accidents were to the hand or arm of employes and the inspectors exercised the greatest care to order all machinery dangerous to operatives guarded. As the workmen become more familiar with the machinery they handle they take greater risks and a number of the accidents were due to this fact, though others were unavoidable and likely to happen with the most modern and well protected machinery.

38 Piece of iron fell on foreman's leg and broke it.
45 Man killed by bucket striking him in the neck.
48 Man had tip of finger cut off in joiner.
146 One man killed.
242 Three men burned face, hands and upper port of body by escaping gas from a furnace—one man died, others recovered.
345 Man killed, fell from ship.
347 Two men burned, not seriously.
353 Man killed by shaft.
405 Two boys fingers cut, not serious.
517 Man lost end of finger on joiner.
542 Man had hand crushed on glazing jack.
645 Man lost finger on joiner; another lost two fingers on rip saw.
672 Man lost two fingers on veneer machine.
678 Man killed by board striking him.
690 Woman had hand crushed.
698 Man killed on log carriage; another killed by flying board.
699 Man lost thumb and part of finger on shaper.
706 Man lost first joints of four fingers on shaper.
707 Man lost four fingers.
786 Man lost arm on shaft.
806 Man killed on shaft; another lost finger on lathe.
882 Man had finger cut on rip saw; another had finger cut off on shaper.
970 Man had foot smashed by stone falling on it.
999 Boy lost four fingers on planer.
1270 Man had three fingers cut off on planer.
1500 Two men lost tips of fingers on planer.
1505 Man had foot taken off by log skid.
1510 Man received internal injuries from fall.
1527 Man lost part of finger on saw.
1543 Man lost part of thumb on hoop knife.
1546 Man had face and hands burned.
1552 Foreman lost two fingers on planer.
1583 Man broke arm in belt; another burnt arm in dryer.
1608 Man badly scalded.
1611 Man lost finger on saw.

1644 Man lost four fingers in shingle mill.
1695 Man lost finger on slab saw.
1713 Man lost leg on log slide; man lost arm on band saw.
1861 Leg broken by explosion.
2096 Killed by clay bank falling in.
2213 Man had leg broken .
2247 Man lost a leg.
2270 Man broke two ribs by falling between two logs; another lost hand and part of arm on a saw.
2280 Man lost use of arm by scalding.
2290 Man broke arm in machine.
2309 Leg broken by stone falling on it.
2299 Man lost leg on saw.
2302 Man slightly burned.
2394 Boy lost end of finger on turning machine;man lost finger in cog wheels; man lost two fingers on saw.

INSPECTION OF CHURCHES.

During the time covered by this report, 1896–97, the factory inspectors personally visited and inspected 548 churches in every part of the state. This is considerably less than the total number in the state, but with the duties of factory inspection and working to stamp out child labor the inspectors were compelled to confine their work to churches which were reported as being in need of a visit and those not looked over in previous inspections. The reports show that of the number inspected about an equal number are brick or frame structures. Those of frame make up 49.5 per cent. of the total; brick, 42.7 per cent.; stone, 6.6 per cent., and 1.2 per cent. were not answered on this particular question. None of the buildings being over two stories in height, doors and inside or outside stairways are depended upon in case of fire and to these the inspectors gave close attention.

A law was passed by the legislature of 1884 providing that doors on churches should swing out, and wherever necessary attention was called to this statute. Unless there was an apparent danger in case of fire, the churches built before 1884 with doors swinging in were not ordered to change them but in other instances the law was strictly enforced. The doors of 295 churches were reported to swing out and on 253 they swing in. The inspectors gave 121 orders to have doors changed to swing out and these were generally complied with.

The total seating capacity reported for 509 churches was 208,784, this making the average seating capacity slightly over 400. The 25 reports from Milwaukee show an average seating capacity of over 600 persons.

The dates when the churches were erected throw some light on the increase of places of worship. These show the increase to be steady and in line with the advance made by the state from an industrial standpoint. A number reported have passed the half century mark in their existence, while one in Prairie du Chien was built as early as 1836. Others were built between 1838 and 1847 in Lake Mills, Milwaukee, Beloit, Elkhorn and Darlington.

In this table under the heading of Frame, Brick or Stone, F indicates Frame; B, Brick, and S, Stone. In answer to whether doors swing in or out I is used as an abbreviation of in and O for out. Under the head of Orders, S. O. means that the doors have been ordered to swing out.

INSPECTION OF CHURCHES.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
Baptist	Albany, Green Co.	F	2 D	1866	I	200	Dec. '97	S O
German Catholic	Albany, Green Co.	F	2 D	1877	..	250	.. ..	S O
Methodist	Albany, Green Co.	F	2 D	1866	..	200	.. ..	S O
Episcopal	Algoma, Kewaunee Co.	B	2 D	1890	..	280	July '97	S O
German M. E.	Algoma, Kewaunee Co.	F	1 D	1870	..	75	.. ..	....
Memorial M. E.	Algoma, Kewaunee Co.	F	1 D	1891	O	400	.. ..	....
St. Mary's Catholic	Algoma, Kewaunee Co.	B	2 D	1892	..	500	.. ..	....
St. Paul Lutheran	Algoma, Kewaunee Co.	F & B	2 D	1896	..	1,200	.. ..	....
Congregational	Amery, Polk Co.	B	2 D	1890	I	200	.. ..	S O
Baptist	Antigo, Langlade Co.	F	3 D	1896	..	250	Nov. '97	S O
First M. E.	Antigo, Langlade Co.	F	2 D	1894	O	800	.. ..	....
German M. E.	Antigo, Langlade Co.	F	2 D	1887	O	200	.. ..	....
Lutheran N. A. C.	Antigo, Langlade Co.	F	1 D	1889	O	150	.. ..	....
Polish Catholic	Antigo, Langlade Co.	F	2 D	1896	I	300	.. ..	....
Presbyterian	Antigo, Langlade Co.	F	2 D	1886	O	600	.. ..	....
Reformed Church	Antigo, Langlade Co.	B	2 D	1896	I	200	.. ..	S O
St. Johns Catholic	Antigo, Langlade Co.	B	2 D	1885	O	300	.. ..	....
Baptist	Appleton, Outagamie Co.	F	2 D	1871	I	175	Sep. '97	....
Congregational	Appleton, Outagamie Co.	S & B	4 D	1888	O	1,000	.. ..	....
Episcopal	Appleton, Outagamie Co.	F	2 D	1864	I	150	.. ..	....
Evangelical Emanual	Appleton, Outagamie Co.	B	2 D	1872	..	300	.. ..	S O
Memorial Presbyterian	Appleton, Outagamie Co.	B	3 D	1879	..	1,000	.. ..	....
Methodist	Appleton, Outagamie Co.	B	4 D	....	..	1,000	.. ..	S O
St. Joseph Catholic	Appleton, Outagamie Co.	B	4 D	1858	O	1,200	.. ..	....
St. Mary's Catholic	Appleton, Outagamie Co.	B	2 D	1894	O	600	.. ..	....
St. Mary's Irish Catholic	Appleton, Outagamie Co.	B	4 D	1885	I	1,200	.. ..	....
St. Johannes Lutheran	Appleton, Outagamie Co.	B	2 D	1894	..	125	.. ..	S O
St. Paul Lutheran	Appleton, Outagamie Co.	B	3 D	1877	..	200	.. ..	S O
Presbyterian	Bangor, La Crosse	F	....	1884	I	175	June '97	....

Christs Catholic	Bayfield, Bayfield Co.	F		1860	I	200	Sep. '97	
Episcopal	Bayfield, Bayfield Co.	F		1879	..	100	.. ..	
Methodist	Bayfield, Bayfield Co.	F		1881	..	175	.. ..	
Presbyterian	Bayfield, Bayfield Co.	F		1888	O	375	.. ..	
Methodist	Beaver Creek, Outagamie Co.	F	1 D	1880	I	200	Oct. '97	S O
St. Marys Catholic	Beaver Creek, Outagamie Co.	F	2 D	1887	..	300	.. ..	S O
Methodist	Beaver Dam, Dodge Co.	B		1871	..		Dec. '97	
Presbyterian	Beaver Dam, Dodge Co.	B		1887	O	400	.. ..	
Lutheran	Belle Plain, Shawano Co.	B	1 D	1895	..	150	Oct. '97	
Methodist	Belle Plain, Shawano Co.	F	1 D	1878	I	100	.. ..	
Bethlehem Lutheran	Beloit, Rock Co.	F	2 D	1893	..	400	.. ..	S O
Christ Episcopal	Beloit, Rock Co.	S	2 D		..	200	.. ..	
Congregational	Beloit, Rock Co.	B	4 D	1858	..	800	.. ..	S O
First Baptist	Beloit, Rock Co.	B	3 D	1846	..	800	.. ..	S O
First Presbyterian	Beloit, Rock Co.	B	2 D	1878	..	650	.. ..	S O
German Lutheran	Beloit, Rock Co.	F	1 D	1878	..	150	.. ..	
Lutheran	Beloit, Rock Co.	F	2 D	1897	..	200	.. ..	S O
Methodist	Beloit, Rock Co.	B & S	2 D	1848	..	500	.. ..	S O
Norwegian Lutheran	Beloit, Rock Co.	F	2 D	1885	..	200	.. ..	S O
St. Thomas Catholic	Beloit, Rock Co.	B	4 D	1851	..	1,000	.. ..	S O
Catholic	Berlin, Green Co.	B		1886	O	600	Dec. '97	
Irish Catholic	Berlin, Green Co.	B		1865	I	250	Sep. '97	
Trinity	Berlin, Green Co.	F		1870	..		Dec. '97	
Congregational	Birnamwood, Shawano Co.	F	2 D	1894	O	250	Nov. '97	
Catholic	Brillion, Calumet Co.	F	2 D	1878	I	300	.. ..	S O
Evang. Frieder Gemeinde	Brillion, Calumet Co.	F	2 D	1896	..	400	.. ..	S O
German Methodist	Brillion, Calumet Co.	F	2 D	1880	..	100	.. ..	
Lutheran	Brillion, Calumet Co.	F	1 D	1882	..	125	.. ..	
Baptist	Brodhead, Green Co.	B	2 D	1854	..	200	Dec. '97	S O
Catholic	Brodhead, Green Co.	F	2 D	1866	..	175	.. ..	
Congregational	Brodhead, Green Co.	F	1 D		..	200	.. ..	S O
Methodist	Brodhead, Green Co.	F	2 D	1878	..	350	.. ..	S O
Norwegian Lutheran	Brodhead, Green Co.	B	1 D	1896	O	200	.. ..	
Congregational	Burlington, Racine Co.	F	2 D	1885	I	250	Aug. '97	S O
Episcopal	Burlington, Racine Co.	B	2 D	1892	O	200	.. ..	
German Lutheran	Burlington, Racine Co.	B	1 D	1883	I	200	.. ..	S O
German Methodist	Burlington, Racine Co.	F	1 D	1892	..	200	.. ..	S O
St. Johannes	Burlington, Racine Co.	F	2 D	1872	..	200	.. ..	S O

INSPECTION OF CHURCHES—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
St. Mary's Catholic	Burlington, Racine Co.	B	5 D	1891	O	1,200	Aug. '97	....
Congregational	Boscobel, Grant Co.	F	1 D	1857	..	400	July '98	....
German Lutheran	Boscobel, Grant Co.	F	1 D	1884	I	175	.. ..	....
Methodist	Boscobel, Grant Co.	F	1 D	1870	..	200	.. ..	....
Evangelical Lutheran	Cedarburg, Ozaukee Co.	B & S	2 D	1891	..	225	July '97	....
Lutheran Trinity	Cedarburg, Ozaukee Co.	S	2 D	1891	O	200	.. ..	....
St. Borgia Catholic	Cedarburg, Ozaukee Co.	F	2 D	1872	..	225	.. ..	....
Congregational	Chilton, Calumet Co.	B	1 D	1883	I	200	Aug. '97	S O
German Lutheran	Chilton, Calumet Co.	B	2 D	1885	I	250	.. ..	S O
Grace Episcopal	Chilton, Calumet Co.	B	2 D	1896	O	225	.. ..	....
St Augustine Catholic	Chilton, Calumet Co.	B	4 D	1879	I	1,200	.. ..	S O
St. Mary's Catholic	Chilton, Calumet Co.	B	4 D	1877	O	1,000	.. ..	....
German Lutheran	Cecil, Calumet Co.	F	1 D	1895	I	900	.. ..	S O
Congregational	Columbus, Columbia Co.	B	....	1875	..	400	Dec. '97	....
German Lutheran	Columbus, Columbia Co.	B	....	1878	O	600	.. ..	....
German Methodist	Columbus, Columbia Co.	B	....	18[illegible]	I	300	.. ..	....
Methodist	Columbus, Columbia Co.	B	....	1872	O	500	.. ..	....
Congregational	Clintonville, Waupaca Co.	B	5 D	1895	..	500	Oct. '97	....
Martin Lutheran	Clintonville, Waupaca Co.	F	2 D	1885	..	600	.. ..	....
German Methodist	Clintonville, Waupaca Co.	F	1 D	1891	I	200	.. ..	S O
Methodist	Clintonville, Waupaca Co.	F	3 D	1889	..	300	.. ..	S O
Norwegian Lutheran	Clintonville, Waupaca Co.	F	1 D	1877	..	175	.. ..	....
St. Joseph Catholic	Clintonville, Waupaca Co.	B	2 D	1880	O	800	.. ..	....
Saturday Auventist	Clintonville, Waupaca Co.	F	1 D	1884	I	125	.. ..	....
Congregational	Cashton, Monroe Co.	F	....	1894	..	....	Nov. '97	S O
Baptist	Darlington, La Fayette Co.	S	1 D	1877	..	250	.. ..	S O
Catholic	Darlington, La Fayette Co.	S	3 D	1868	..	800	.. ..	S O
Congregational	Darlington, La Fayette Co.	F	3 D	1847	O	600	.. ..	....
Methodist	Darlington, La Fayette Co.	B & S	2 D	1887	I	450	.. ..	S O
Baptist	Delavan, Walworth Co.	B	8 D	1886	O	800	Oct. '97	....

Christ. Episcopal	Delavan, Walworth Co.	B	4 D	1877	I	800	Oct. '97	S O
Congregational	Delavan, Walworth Co.	B	2 D	1886	O	300	.. ..	....
German Lutheran	Delavan, Walworth Co.	F	1 D	1897	..	100	.. ..	....
Methodist	Delavan, Walworth Co.	B	2 D	1864	I	800	.. ..	S O
St. Andrew's Catholic	Delavan, Walworth Co.	B	2 D	1895	O	800	.. ..	....
Baptist	Edgerton, Rock Co.	B	2 D	1880	I	250	Nov. '97	S O
Congregational	Edgerton, Rock Co.	F	2 D	1894	O	500	.. ..	....
German Lutheran	Edgerton, Rock Co.	B	2 D	1884	..	300	.. ..	....
Methodist Episcopal	Edgerton, Rock Co.	B	2 D	1895	..	400	.. ..	....
Norwegian Lutheran	Edgerton, Rock Co.	B	2 D	1885	I	150	Nov. '97	....
Baptist	Elkhorn, Walworth Co.	B	3 D	1885	O	500	Oct. '97	....
Congregational	Elkhorn, Walworth Co.	B	2 D	1883	O	400	.. ..	....
German Lutheran	Elkhorn, Walworth Co.	F	2 D	1889	..	175	.. ..	....
Methodist Episcopal	Elkhorn, Walworth Co.	B	1 D	1888	..	850	.. ..	....
St. Patrick's Catholic	Elkhorn, Walworth Co.	B	2 D	1881	I	350	.. ..	S O
Universalist	Elkhorn, Walworth Co.	F	1 D	1845	..	150	.. ..	....
Congregational	Embarrass, Waupaca Co.	F	1 D	1876	..	100	.. ..	....
German Lutheran	Embarrass, Waupaca Co.	F	1 D	1880	..	150	.. ..	....
German Lutheran	Fairchild, Eau Claire Co.	F	....	1888	O	200	Sep. '97	....
Methodist Episcopal	Fairchild, Eau Claire Co.	F	....	1893	O	200	.. ..	....
Polish Catholic	Fairchild, Eau Claire Co.	F	....	1888	..	250	.. ..	....
Presbyterian	Fox Lake, Dodge Co.	B	....	....	I	....	Dec. '97	....
St. Mary's Catholic	Fox Lake, Dodge Co.	....	....	1892	O	500	.. ..	....
Congregational.	Fort Atkinson, Jefferson Co.	F	2 D	1875	I	350	Oct. '97	....
German Methodist	Fort Atkinson, Jefferson Co.	F	3 D	1891	O	150	.. ..	....
Methodist Episcopal	Fort Atkinson, Jefferson Co.	F	2 D	1891	O	900	.. ..	....
St. Joseph Catholic	Fort Atkinson, Jefferson Co.	B	2 D	1888	I	200	.. ..	S O
Universalist	Fort Atkinson, Jefferson Co.	F	3 D	....	O	200	.. ..	....
Baptist	Green Bay, Brown Co.	B	3 D	1875	I	800	Aug. '97	S O
Catholic Cathedral	Green Bay, Brown Co.	B	3 D	1876	..	1,000	.. ..	....
Central Baptist	Green Bay, Brown Co.	F	1 D	1871	..	200	.. ..	S O
Christ Episcopal	Green Bay, Brown Co.	F	2 D	1871	..	800	.. ..	S O
First Presbyterian	Green Bay, Brown Co.	F	1 D	1891	..	100	.. ..	....
German Lutheran	Green Bay, Brown Co.	F	3 D	1863	O	850	.. ..	....
Holland Catholic	Green, Bay, Brown Co.	B	3 D	1876	O	1,500	.. ..	....
Madison St. M. E.	Green, Bay, Brown Co.	B	1 D	1858	I	350	.. ..	S O
Moravian	Green, Bay, Brown Co.	F	1 D	1880	..	200	.. ..	S O
Presbyterian	Green, Bay, Brown Co.	B	4 D	1891	..	800	.. ..	S O
St. John's Catholic	Green, Bay, Brown Co.	B	7 D	1878	O	1,200	.. ..	S O

INSPECTION OF CHURCHES.—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swin in or out.	Seating capacity.	Date of inspec on.	Orders.
St. Paul Lutheran	Green Bay, Brown Co.	F	3 D	1883	I	300	Aug. '97	S O
St. Paul M. E.	Green Bay, Brown Co.	S	3 D	1890	O	400	.. ..	....
St. Patrick's Catholic	Green Bay, Brown Co.	B	5 D	1894	..	1,500	.. ..	....
Spiritualist	Green Bay, Brown Co.	F	1 D	1878	I	100	.. ..	....
Catholic	Gratiot, La Fayette Co.	F	2 D	1854	O	250	Dec. '97	....
Methodist Episcopal	Gratiot, La Fayette Co.	F	1 D	1877	I	150	.. ..	....
St. Paul Lutheran	Grafton, Ozaukee Co.	S	2 D	1870	O	200	July '97	....
Congregational	Hartford, Washington Co.	B	1 D	1885	I	200	Aug. '97	S O
Evang. Lutheran	Hartford, Washington Co.	B	3 D	1897	..	400	.. ..	S O
Evang. Zions Gemenschaft	Hartford, Washington Co.	B	2 D	1885	O	150	.. ..	....
Lutheran Reformed	Hartford, Washington Co.	F	1 D	1877	I	100	.. ..	....
Methodist Episcopal	Hartford, Washington Co.	F	1 D	1864	..	200	.. ..	S O
St. Kilian Catholic	Hartford, Washington Co.	B	2 D	1876	..	400	.. ..	S O
Evang. St. Stevens	Horicon, Dodge Co.	F	....	1873	..	100	Dec. '97	S O
Methodist Episcopal	Horicon, Dodge Co.	F	....	1853	O	300	.. ..	....
Baptist	Hortonville, Outagamie Co.	F	2 D	1884	O	200	Oct. '97	....
Evang. Lutheran	Hortonville, Outagamie Co.	B	2 D	1897	..	500	.. ..	....
Methodist Episcopal	Hortonville, Outagamie Co.	F	2 D	1878	I	200	.. ..	S O
St. Paul Catholic	Hortonville, Outagamie Co.	B	2 D	1894	O	500	.. ..	....
Norwegian Lutheran	Independence, Trempealeau Co.	F	1 D	1884	..	150	Dec. '97	....
Polish Catholic	Independence, Trempealeau Co.	B	3 D	1895	..	1,200	.. ..	....
Episcopal	Jefferson, Jefferson Co.	B	1 D	1867	I	125	Oct. '97	....
Evang. Gemenschaft	Jefferson, Jefferson Co.	B	1 D	1877	..	250	.. ..	S O
Evang. Lutheran	Jefferson, Jefferson Co.	B	4 D	1895	O	1,250	.. ..	....
German M. E.	Jefferson, Jefferson Co.	B	2 D	1877	I	175	.. ..	....
St. Johannes Catholic	Jefferson, Jefferson Co.	B	2 D	1866	O	800	Oct. '97	....
Congregational	Kaukauna, Outagamie Co.	F	2 D	1891	O	400	Sep. '97	....
Congregational	Kaukauna, Outagamie Co.	F	1 D	1876	I	300	.. ..	S O
Epworth M. E.	Kaukauna, Outagamie Co.	F	2 D	1886	O	800	.. ..	....
Evang.. Lutheran	Kaukauna, Outagamie Co.	B	2 D	1877	I	200	.. ..	S O

Excelsior Catholic	Kaukauna, Outagamie Co.	B	2 D	1877	I	500	Sept. '97	S O
Lutheran Reform	Kaukauna, Outagamie Co.	B	2 D	1884	I	200	.. ..	S O
St. Mary's Catholic	Kaukauna, Outagamie Co.	B	3 D	1885	O	550	.. ..	....
Congregational	Kewaunee, Kewaunee Co.	F	2 D	1885	I	200	July '97	S O
German Lutheran	Kewaunee, Kewaunee Co.	B	3 D	1889	O	200	.. ..	....
Holy Catholic	Kewaunee, Kewaunee Co.	B	3 D	1895	O	850	.. ..	....
St. Paul & St Peter	Kiel, Manitowoc Co.	F	2 D	1885	O	250	.. ..	....
St. Paul & St. Peter Lutheran	Kiel, Manitowoc Co.	B	2 D	....	O	200	.. ..	....
Presbyterian	Kilbourn, Columbia Co.	F	....	1892	O	300	Dec. '97	....
Congregational	Lake Mills, Jefferson Co.	B	1 D	1847	I	300	Nov. '97	S O
Methodist Episcopal	Lake Mills, Jefferson Co.	B	2 D	1877	I	300	.. ..	S O
Moravian	Lake Mills, Jefferson Co.	B	2 D	1872	I	125	.. ..	....
Mt. Horeb Evang. Lutheran	Lake Mills, Jefferson Co.	B	2 D	1891	O	300	.. ..	....
St. John's Catholic	Little Chute, Outagamie Co.	S	4 D	1848	I	1,000	Sep. '97	S O
Baptist	La Crosse, La Crosse Co.	F	....	1889	O	250	Mch. '97	....
Church of Christ	La Crosse, La Crosse Co.	B	....	1884	O	200	.. ..	....
Christ Church	La Crosse, La Crosse Co.	F	....	1881	..	500	.. ..	....
Congregational	La Crosse, La Crosse Co.	B	....	1875	..	800	.. ..	....
First Baptist	La Crosse, La Crosse Co.	S	....	1866	..	400	.. ..	....
First Evang.	La Crosse, La Crosse Co.	S	....	1896	..	450	.. ..	....
German Baptist	La Crosse, La Crosse Co.	F	....	1884	..	125	.. ..	....
German M. E.	La Crosse, La Crosse Co.	B	....	1895	..	600	.. ..	....
German M. E.	La Crosse, La Crosse Co.	B	....	1888	..	250	.. ..	....
Grace Chappel	La Crosse, La Crosse Co.	F	....	1890	..	150	.. ..	....
Lutheran	La Crosse, La Crosse Co.	B	....	1868	..	400	.. ..	....
Lutheran Baptist	La Crosse, La Crosse Co.	F	....	1893	..	150	.. ..	....
Methodist Episcopal	La Crosse, La Crosse Co.	F	....	1890	..	300	.. ..	....
Norwegian Lutheran	La Crosse, La Crosse Co.	B	....	1890	..	250	.. ..	....
Norwegian Baptist	La Crosse, La Crosse Co.	F	....	1887	..	150	.. ..	....
Norwegian M. E.	La Crosse, La Crosse Co.	F	....	....	I	100	.. ..	....
Norwegian Evang. Lutheran	La Crosse, La Crosse Co.	B	....	1890	O	300	.. ..	....
Presbyterian	La Crosse, La Crosse Co.	F	2 D	1879	..	500	.. ..	....
Presbyterian	La Crosse, La Crosse Co.	F	....	1896	..	300	.. ..	....
St. James' Catholic	La Crosse, La Crosse Co.	B	....	1886	..	500	.. ..	....
St. Joseph's Catholic	La Crosse, La Crosse Co.	B	....	1869	..	900	.. ..	....
St Mary's Catholic	La Crosse, La Crosse Co.	B	....	1874	..	400	.. ..	....
St. Paul Universalist	La Crosse, La Crosse Co.	B	....	1878	..	350	.. ..	....
St. Paul Evang.	La Crosse, La Crosse Co.	B	....	1896	..	550	.. ..	....
Wood St. M. E.	La Crosse, La Crosse Co.	F	....	1890	..	150	.. ..	....
Advent Church	Loyal, Clark Co.	B	....	1893	I	300	June '98	S O

INSPECTION OF CHURCHES.—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
Methodist	Loyal, Clark Co.	B	....	1894	O	300	June '98	....
St Bathasas Catholic	Loyal, Clark Co.	B	....	1894	..	500	.. ..	S O
Immaculate Conception Catholic	Manitowoc, Manitowoc Co.	F	2 D	1877	I	150	Aug. '97	....
Evangelical Reform	Manitowoc, Manitowoc Co.	F	3 D	1892	O	400	.. ..	....
First Presbyterian	Manitowoc, Manitowoc Co.	B	3 D	1870	..	750	.. ..	....
German Lutheran	Manitowoc, Manitowoc Co.	B	2 D	1873	..	1,000	.. ..	....
German M. E.	Manitowoc, Manitowoc Co.	B	2 D	1882	..	250	.. ..	....
Norwegian Lutheran	Manitowoc, Manitowoc Co.	F	2 D	1887	..	200	.. ..	....
Norwegian M. E.	Manitowoc, Manitowoc Co.	F	1 D	1875	I	50	.. ..	....
St. Boniface Catholic	Manitowoc, Manitowoc Co.	B	4 D	1885	O	1,200	.. ..	....
St. James Episcopal	Manitowoc, Manitowoc Co.	F	2 D	1859	I	150	.. ..	....
St. Paul Norwegian Lutheran	Manitowoc, Manitowoc Co.	F	1 D	1881	..	175	.. ..	....
St. Paul M. E.	Manitowoc, Manitowoc Co.	F	2 D	1878	..	200	.. ..	....
Evang. Lutheran	Marathon, Marathon Co.	B	1 D	1888	O	150	Nov., '97	....
Votivitas Catholic	Marathon, Marathon Co.	B	4 D	1875	..	500	.. ..	....
Baptist Tabernacle	Marinette, Marinette Co.	F	2 D	1881	..	200	Oct., '97	....
Danish Lutheran	Marinette, Marinette Co.	F	2 D	1887	I	300	.. ..	S O
Episcopal	Marinette, Marinette Co.	F	2 D	1885	..	250	.. ..	S O
Evang. Lutheran	Marinette, Marinette Co.	F	2 D	1876	..	300	.. ..	S O
First Baptist	Marinette, Marinette Co.	B	2 D	1893	O	1,000	.. ..	....
French St. Joseph	Marinette, Marinette Co.	B	4 D	1891	..	800	.. ..	....
German Lutheran	Marinette, Marinette Co.	F	2 D	1887	I	400	.. ..	....
Methodist Episcopal	Marinette, Marinette Co.	B	5 D	1896	O	1,200	.. ..	....
Norwegian Lutheran	Marinette, Marinette Co.	F	2 D	....	I	250	.. ..	S O
Our Lady of the Lord	Marinette, Marinette Co.	B	4 D	1876	O	500	.. ..	....
Pioneer Presbyterian	Marinette, Marinette Co.	F	4 D	1894	..	1,000	.. ..	....
Polish Sacred Heart	Marinette, Marinette Co.	F	2 D	1893	..	800	.. ..	....
Swedish Baptist	Marinette, Marinette Co.	F	1 D	1888	I	150	.. ..	S O
Swedish M. E.	Marinette, Marinette Co.	F	2 D	1888	..	150	.. ..	S O
Swedish Mission Haset	Marinette, Marinette Co.	F	2 D	1889	..	150	.. ..	S O
Union Chapel	Marinette, Marinette Co.	F	2 D	1874	O	200	.. ..	....

Catholic	Mayville, Dodge Co.	B		1881	O	400	Dec., '97	
German Lutheran	Mayville, Dodge Co.	F		1885	..	300	.. ..	
St. Paul Lutheran	Medina, Outagamie Co.	F	1 D	1888	I	150	Oct., '97	S O
Congregational	Menasha, Winnebago Co.	B	2 D	1877	..	400	Sept., '97	S O
Episcopal	Menasha, Winnebago Co.	F	2 D	1850	..	150	.. ..	
German Lutheran	Menasha, Winnebago Co.	B	2 D	1890	O	500	.. ..	
German M. E.	Menasha, Winnebago Co.	B	2 D	1856	I	250	.. ..	S O
German M. E.	Menasha, Winnebago Co.	B	2 D	1890	O	500	.. ..	
Norwegian	Menasha, Winnebago Co.	F	1 D	1875	I	125	.. ..	
St. John's Catholic	Menasha, Winnebago Co.	B	4 D	1888	..	850	.. ..	
St. Mary's Catholic	Menasha, Winnebago Co.	B	4 D	1883	O	1,000	.. ..	
St. Patricks Catholic	Menasha, Winnebago Co.	B	5 D	1883	..	800	.. ..	
German M. E.	Menomonie, Dunn Co.	F		1883	I	200	Aug., '97	
German Lutheran	Menomonie, Dunn Co.	F	2 D	1884	..	200	.. ..	
Methodist Episcopal	Menomonie, Dunn Co.	B			..	200	.. ..	
Methodist Episcopal	Menomonie, Dunn Co.	F	1 D	1883	..	300	.. ..	
Norwegian Lutheran	Menomonie, Dunn Co.	F		1885	O	275	.. ..	
St. Joseph's Catholic	Menomonie, Dunn Co.	F		1865	I	129	.. ..	
St. Joseph's Catholic	Menomonie, Dunn Co.	B		1883	O	400	.. ..	
St. Paul Lutheran	Menomonie, Dunn Co.	B		1887	..	450	.. ..	
Adventist	Milton Junction, Rock Co.	F	2 D	1887	..	300	Nov. '97	
German Catholic	Milton Junction, Rock Co.	F	2 D	1877	I	175	.. ..	
Methodist Episcopal	Milton Junction, Rock Co.	F	2 D	1888	O	500	.. ..	
Beve Jesherum	Milwaukee, Milwaukee Co.	B	4 D	1886	O	1,200	Jan. '97	
Calvary	Milwaukee, Milwaukee Co.	B	5 D	1870	..	800	.. ..	
Christ Congregational	Milwaukee, Milwaukee Co.	F	2 D	1895	..	250	.. ..	
Christ Episcopal	Milwaukee, Milwaukee Co.	F	2 D	1895	..	200	.. ..	
Emanual	Milwaukee, Milwaukee Co.	S	2 D	1873	..	1,000	.. ..	
Emanual	Milwaukee, Milwaukee Co.	F	2 D	1882	I	200	.. ..	
Fifth Baptist	Milwaukee, Milwaukee Co.	F	2 D	1884	O	300	.. ..	
First Dutch	Milwaukee, Milwaukee Co.	B	2 D	1874	..	450	.. ..	
First Baptist	Milwaukee, Milwaukee Co.	B	3 D	1888	..	500	.. ..	
First Unitarian	Milwaukee, Milwaukee Co.	S	3 D	1888	..	500	.. ..	
Gesu Church	Milwaukee, Milwaukee Co.	S	9 D	1893	..	2,000	.. ..	
German M. E.	Milwaukee, Milwaukee Co.	B	2 D	1890	..	900	.. ..	
Grand Ave. M. E.	Milwaukee, Milwaukee Co.	B	2 D	1870	..	1,000	.. ..	
Grand Ave. Congregational	Milwaukee, Milwaukee Co.	B	5 D	1887	..	1,400	.. ..	
Guaden Lutheran	Milwaukee, Milwaukee Co.	B	2 D	1856	..	200	.. ..	
Holy Name	Milwaukee, Milwaukee Co.	F	1 D	1876	..	450	.. ..	
Holy Rosary Catholic	Milwaukee, Milwaukee Co.	B	3 D	1885	..	600	.. ..	

INSPECTION OF CHURCHES.—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
Lutheran	Milwaukee, Milwaukee Co.	F	1 D	1885	I	250	Jan. '97	....
Methodist Episcopal	Milwaukee, Milwaukee Co.	F	4 D	1886	O	420	.. ..	....
Methodist Episcopal	Milwaukee, Milwaukee Co.	B	3 D	1868	..	500	.. ..	....
Methodist Episcopal	Milwaukee, Milwaukee Co.	F	2 D	1889	..	300	.. ..	....
Pilgrim Congregational	Milwaukee, Milwaukee Co.	F	3 D	1887	..	450	.. ..	....
Redeemer Church	Milwaukee, Milwaukee Co.	B	2 D	1890	..	500	.. ..	....
St. Hedwig	Milwaukee, Milwaukee Co.	B	4 D	1886	..	1,500	.. ..	....
St. Mary's Catholic	Milwaukee, Milwaukee Co.	B	4 D	1867	..	1,000	.. ..	....
St. John's Cathedral	Milwaukee, Milwaukee Co.	B	5 D	1850	..	1,000	.. ..	....
St. Marcus	Milwaukee, Milwaukee Co.	F	2 D	1881	..	800	.. ..	....
St. Mathew's	Milwaukee, Milwaukee Co.	B	2 D	1875	..	800	.. ..	....
St. Mark's Episcopal	Milwaukee, Milwaukee Co.	F	3 D	1894	..	200	.. ..	....
St. Paul and St. Peter	Milwaukee, Milwaukee Co.	B	4 D	1890	..	600	.. ..	....
St. Stevens	Milwaukee, Milwaukee Co.	F	3 D	1890	..	300	.. ..	....
St. Paul	Milwaukee, Milwaukee Co.	S	5 D	1838	..	1,200	.. ..	....
St. Rose of Lima	Milwaukee, Milwaukee Co.	B	3 D	1889	..	600	.. ..	....
St. Paul and St. Peter Chapel	Milwaukee, Milwaukee Co.	B	3 D	1889	..	150	.. ..	....
Salem	Milwaukee, Milwaukee Co.	F	3 D	1889	..	300	.. ..	....
Tabernacle	Milwaukee, Milwaukee Co.	B	4 D	1889	..	1,000	.. ..	....
Tabernacle	Milwaukee, Milwaukee Co.	B	3 D	1892	..	250	.. ..	....
West Minister Presbyterian	Milwaukee, Milwaukee Co.	F	1 D	1880	I	200	.. ..	....
West Minister Presbyterian	Milwaukee, Milwaukee Co.	F	3 D	1895	O	1,000	.. ..	....
Episcopal	Mineral Point, Iowa Co.	B	2 D	1884	I	300	Nov. '97	S O
Methodist Episcopal	Mineral Point, Iowa Co.	F	3 D	1867	O	550	.. ..	....
Methodist Episcopal	Mineral Point, Iowa Co.	B	5 D	1892	I	1,200	.. ..	S O
Salvation Army Church	Mineral Point, Iowa Co.	B	2 D	1877	..	150	.. ..	....
St. Paul Catholic	Mineral Point, Iowa Co.	S	2 D	1880	O	400		
Adventist	Monroe, Green Co.	F	2 D	1877	I	75	.. ..	....
Catholic	Monroe, Green Co.	F	4 D	1893	O	800	Dec., '97	....
Catholic	Monroe, Green Co.	F	2 D	1888	..	200	.. ..	....
Christ Church	Monroe, Green Co.	F	1 D	1879	I	125	.. ..	....

Episcopal	Monroe, Green Co.	F	1 D	1860	..	50	Dec. '97	....
Evang. Lutheran	Monroe, Green Co.	F	1 D	1891	..	200	.. ..	S O
German Lutheran	Monroe, Green Co.	F	2 D	1897	O	500	.. ..	....
German Catholic	Monroe, Green Co.	F	2 D	1860	I	100	.. ..	....
German Evangelical	Monroe, Green Co.	B	2 D	1889	O	250	.. ..	....
German M. E.	Monroe, Green Co.	F	1 D	1881	I	125	Dec., '97	....
Methodist Episcopal	Monroe, Green Co.	F	2 D	1891	O	250	.. ..	....
Methodist Episcopal	Monroe, Green Co.	F	2 D	1897	I	800	.. ..	S O
Presbyterian	Monroe, Green Co.	F	1 D	1848	..	200	.. ..	S O
United Brethren	Monroe, Green Co.	F	1 D	1877	..	75	.. ..	....
Universalist	Monroe, Green Co.	B	2 D	1850	..	400	.. ..	S O
Lutheran	Marion, Waupaca Co.	F	1 D	1885	..	125	Nov., '97	....
Baptist	Monticello, Green Co.	S	2 D	1861	..	150	Dec., '97	....
Evang. Reformed	Monticello, Green Co.	F	1 D	1888	..	250	.. ..	....
Methodist Episcopal	Monticello, Green Co.	F	1 D	....	..	200	.. ..	S O
Seventh Day Adventist	Monticello, Green Co.	F	2 D	1895	..	150	.. ..	....
Methodist Episcopal	Mauston, Juneau Co.	....	....	1880	O	....	.. ..	....
St. Patricks	Mauston, Juneau Co.	F	....	1880	..	....	.. ..	....
St. Johns Catholic	Marshfield, Wood Co.	B	....	1893	..	1,000	Feb., '97	....
Christ Presbyterian	Madison, Dane Co.	S	....	1892	..	600	Mch., '98	....
Christ Scientist	Madison, Dane Co.	S	....	1863	I	175	.. ..	....
Episcopal Grace	Madison, Dane Co.	S	....	1858	..	850	.. ..	....
First Baptist	Madison, Dane Co.	S	....	1853	..	300	.. ..	....
First Methodist	Madison, Dane Co.	S	....	1876	..	800	.. ..	....
First Congregational	Madison, Dane Co.	S & B	....	1866	O	1,200	.. ..	....
Holy Redeemer	Madison, Dane Co.	B	....	1869	I	1,000	.. ..	....
Norwegian Lutheran	Madison, Dane Co.	F	....	1878	..	275	.. ..	....
Our Savior	Madison, Dane Co.	F	....	1897	O	275	.. ..	....
St. Johns Lutheran	Madison, Dane Co.	F	....	1873	..	200	.. ..	....
St. Patrick	Madison, Dane Co.	B	....	1888	..	500	.. ..	....
St. Raphael's Catholic	Madison, Dane Co.	S	....	1850	I	1,100	.. ..	S O
Unitarian Society	Madison, Dane Co.	S	....	....	O	400	.. ..	....
Baptist	Mazomanie, Dane Co.	F & S	1 D	1865	I	150	July, '98	....
Congregational	Mazomanie, Dane Co.	F	2 D	1891	O	450	.. ..	....
Catholic	Mazomanie, Dane Co.	S	2 D	1890	..	1,000	.. ..	....
English Lutheran	Mazomanie, Dane Co.	F	1 D	1871	..	100	.. ..	....
Evang. Germanschoft Salems	Mazomanie, Dane Co.	S	1 D	1874	I	250	.. ..	....
Methodist Episcopal	Mazomanie, Dane Co.	B	1 D	1870	..	250	.. ..	....
Baptist	Neenah, Winnebago Co.	F	2 D	1896	O	250	Sept., '97	....
Danish Baptist	Neenah, Winnebago Co.	F	2 D	1857	I	75	.. ..	....
Danish Lutheran	Neenah, Winnebago Co.	F	2 D	1883	..	250	.. ..	S O

INSPECTION OF CHURCHES.—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
First Presbyterian	Neenah, Winnebago Co.	F	3 D	1874	I	500	Sept. '97	S O
Methodist Episcopal	Neenah, Winnebago Co.	F	2 D	1888	O	500	.. ..	....
Norwegian	Neenah, Winnebago Co.	F	1 D	1862	I	125	.. ..	....
Norwegian Lutheran	Neenah, Winnebago Co.	F	1 D	1880	..	175	.. ..	....
Reformed Lutheran	Neenah, Winnebago Co.	B	2 D	1891	O	75	.. ..	....
Trinity Lutheran	Neenah, Winnebago Co.	B	2 D	1888	..	550	.. ..	....
Universal Good Shepherd	Neenah, Winnebago Co.	B	1 D	1867	I	300	.. ..	S O
Evang. Lutheran	Neillsville, Clark Co.	B	....	1895	O	250	.. ..	....
St. Johannes Lutheran	New London, Waupaca Co.	B	1 D	1881	I	75	.. ..	....
Saturday Adventist	New London, Waupaca Co.	F	1 D	1895	O	125	.. ..	....
St. Joseph's Catholic	New London, Waupaca Co.	B	3 D	1890	..	800	.. ..	....
St. Paul Lutheran	New London, Waupaca Co.	B	2 D	1875	I	400	.. ..	S O
Congregational	Norrie, Marathon Co.	F	2 D	1894	O	250	Nov., '97	....
Congregational	Nekoosa, Wood Co.	F	2 D	1894	..	250	.. ..	....
Lutheran	Nekoosa, Wood Co.	F	1 D	1890	..	....	.. ..	....
Baptist	Oakfield, Fond du Lac Co.	F	....	1867	I	150	July, '97	....
Grace Church	Oakfield, Fond du Lac Co.	F	....	1892	..	200	.. ..	S O
Methodist Episcopal	Oakfield, Fond du Lac Co.	F	....	1884	..	150	.. ..	S O
St. Lucas Lutheran	Oakfield, Fond du Lac Co.	B	....	1892	..	200	.. ..	S O
Episcopal	Oconto, Oconto Co.	F	2 D	1878	I	100	Oct. '97	....
Evang. Lutheran	Oconto, Oconto Co.	B	2 D	1889	..	225	.. ..	S O
Evang. Lutheran	Oconto, Oconto Co.	F	1 D	1884	..	100	.. ..	....
French Catholic	Oconto, Oconto Co.	F	2 D	1857	O	200	.. ..	....
Methodist Episcopal	Oconto, Oconto Co.	B	5 D	1866	..	450	.. ..	....
Presbyterian	Oconto, Oconto Co.	B	3 D	1893	..	650	.. ..	....
St. Joseph's Catholic	Oconto, Oconto Co.	B	5 D	1870	..	1,400	.. ..	....
Evang. Lutheran	Oshkosh, Winnebago Co.	B	....	1874	..	800	Feb. '97	....
Evang. Lutheran	Oshkosh, Winnebago Co.	F	....	1882	..	300	.. ..	....
First Presbyterian	Oshkosh, Winnebago Co.	....	....	1893	..	800	.. ..	....
German Methodist	Oshkosh, Winnebago Co.	B	....	1885	..	400	.. ..	....
Methodist Episcopal	Oshkosh, Winnebago Co.	S	....	1890	..	900	.. ..	....

St. Johns Universalist	Oshkosh, Winnebago Co.	F	......	1889	......	300	Feb. '97	......
St. Mary's Catholic	Oshkosh, Winnebago Co.	B	......	1886	O	1,500	.. ..	......
St. Peters Roman Catholic	Oshkosh, Winnebago Co.	B	......	1875	..	900	.. ..	......
Second M. E.	Oshkosh, Winnebago Co.	B	......	1872	..	250	.. ..	......
Congregational	Peshtigo, Marinette Co.	F	2 D	1880	I	300	.. ..	S O
Evang. Lutheran	Peshtigo, Marinette Co.	F	1 D	1896	O	350	.. ..	......
Methodist Episcopal	Peshtigo, Marinette Co.	F	1 D	1873	I	125	.. ..	......
St. Mary's Catholic	Peshtigo, Marinette Co.	F	2 D	1872	..	250	.. ..	S O
Congregational	Platteville, Grant Co.	B	4 D	1874	..	2,000	Dec. '97	S O
Christian Church	Platteville, Grant Co.	......	1 D	1884	..	250	.. ..	S O
Evang. Lutheran	Platteville, Grant Co.	F	2 D	1888	..	200	.. ..	S O
Father Henipin Catholic	Platteville, Grant Co.	B	2 D	......	O	250	.. ..	......
German M. E.	Platteville, Grant Co.	B	1 D	1876	I	175	.. ..	......
Lutheran	Platteville, Grant Co.	B	2 D	......	I	250	.. ..	S O
Methodist Episcopal	Platteville Grant Co.	B	4 D	1877	O	1,000	.. ..	......
Trinity	Platteville, Grant Co.	B	2 D	1864	I	450	.. ..	S O
Episcopal	Plymouth, Calumet Co.	F	4 D	1881	O	200	Aug. '97	......
Evang. Lutheran	Plymouth, Calumet Co.	B	5 D	1890	..	400	.. ..	......
German Catholic	Plymouth, Calumet Co.	F	2 D	1874	I	200	.. ..	S O
German M. E.	Plymouth, Calumet Co.	F	1 D	1865	..	100	.. ..	......
Emanuel	Port Washington, Ozaukee Co.	B	1 D	1862	..	50	.. ..	......
Episcopal E. M.	Port Washington, Ozaukee Co.	B	2 D	1851	O	350	.. ..	......
Evangelical	Port Washington, Ozaukee Co.	B	2 D	1889	..	800	.. ..	......
St. Johannes Lutheran	Port Washington, Ozaukee Co.	F	2 D	1892	I	200	.. ..	......
St. Mary's Catholic	Port Washington, Ozaukee Co.	B	4 D	1882	O	1,000	.. ..	......
Catholic Church	Prentice, Price Co.	F	......	1893	..	200	Nov. '97	......
Presbyterian	Prentice, Price Co.	F	......	1893	..	250	.. ..	......
Baptist	Portage, Columbia Co.	B	......	1853	I	......	.. ..	......
Episcopal	Portage, Columbia Co.	......	......	......	..	......	.. ..	......
Presbyterian	Portage, Columbia Co.	B	2 D	1892	O	500	.. ..	......
St. Mary's	Portage, Columbia Co.	B	......	1886	..	......	.. ..	......
Bohemian Catholic	Prairie du Chien, Crawford Co.	F	1 D	1891	O	200	July '98	......
Congregational	Prairie du Chien, Crawford Co.	B	1 D	1857	I	400	.. ..	......
Episcopal	Prairie du Chien, Crawford Co.	F	1 D	1870	..	150	.. ..	......
Evang. Zions	Prairie du Chien, Crawford Co.	F	3 D	1865	..	250	.. ..	......
Evang. Lutheran St. Peters	Prairie du Chien, Crawford Co.	F	1 D	......	O	150	.. ..	......
Methodist Episcopal	Prairie du Chien, Crawford Co.	F	1 D	1849	I	150	.. ..	......
St. Gabriel Catholic	Prairie du Chien, Crawford Co.	S	2 D	1836	..	450	.. ..	......
Bohemian Catholic	Reedsville, Manitowoc Co.	B	2 D	1884	..	150	Nov. '97	......
Evang. Lutheran	Reedsville, Manitowoc Co.	B	2 D	1879	......	250	.. ..	S O

INSPECTION OF CHURCHES.—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
Reform Lutheran	Reedsville, Manitowoc Co.	F	1 D	1880	O	300	Nov. '97	....
German Catholic	Rib Lake, Taylor Co.	F	....	1896	..	150	.. ..	....
Methodist Episcopal	Rib Lake, Taylor Co.	F	1 D	1893	..	150	.. ..	....
Congregational	Ripon, Fond du Lac Co.	S	....	1868	O	400	Nov. '97	....
Congregational	Ripon, Fond du Lac Co.	B	....	1860	I	700	.. ..	....
Baptist	Richland Center, Richland Co.	B	1 D	1877	..	250	July '98	....
Christian Church	Richland Center, Richland Co.	F	2 D	1878	..	400	.. ..	....
First Presbyterian	Richland Center, Richland Co.	B	2 D	1857	O	600	.. ..	....
Lutheran	Richland Center, Richland Co.	B	2 D	1892	I	400	.. ..	....
St. Mary's Catholic	Richland Center, Richland Co.	B	2 D	1891	O	800	.. ..	....
United Brothers	Richland Center, Richland Co.	F	2 D	1894	I & O	450	.. ..	....
Evang. Lutheran	Schlessingerville, Washington Co.	B	1 D	1886	O	250	Aug. '97	....
Reformed Church	Schlessingerville, Washington Co.	B	1 D	1872	I	150	.. ..	....
St. Mary's Catholic	Schlessingerville, Washington Co.	S	3 D	1894	O	600	.. ..	....
Catholic	Seymour, Outagamie Co.	F	....	1879	I	175	Dec. '97	....
Congregational	Seymour, Outagamie Co.	F	....	1890	O	200	.. ..	....
Evang. Lutheran	Seymour, Outagamie Co.	B	....	1878	I	200	.. ..	....
St. Paul M. E.	Seymour, Outagamie Co.	F	....	1896	O	350	.. ..	....
Zions Church	Seymour, Outagamie Co.	F	....	1873	I	150	.. ..	....
Episcopal	Shawano, Shawano Co.	F	2 D	1891	O	250	.. ..	....
Lutheran	Shawano Shawano Co.	F	2 D	1878	..	200	.. ..	....
Methodist Episcopal	Shawano, Shawano Co.	F	1 D	1877	I	200	.. ..	S O
Presbyterian	Shawano, Shawano Co.	F	2 D	1883	..	400	.. ..	S O
St. John's Catholic	Shawano, Shawano Co.	B	2 D	1890	O	500	.. ..	....
Congregational	Shullsburg, La Fayette Co.	B	3 D	1857	..	600	.. ..	....
Lutheran	Shullsburg, La Fayette Co.	F	1 D	1860	I	100	.. ..	....
Methodist Episcopal	Shullsburg, La Fayette Co.	S	1 D	1867	..	400	.. ..	S O
St. Mathews	Shullsburg, La Fayette Co.	S	3 D	1865	O	600	.. ..	....
Baptist	Stoughton, Dane Co.	F	1 D	1879	I	250	Nov. '97	S O
Congregational	Stoughton, Dane Co.	F	2 D	1880	..	125	.. ..	....
First Universalist	Stoughton, Dane Co.	B	3 D	1858	..	200	.. ..	S O
Lutheran	Stoughton, Dane Co.	B	4 D	1893	..	600	.. ..	S O

Methodist Episcopal	Stoughton, Dane Co	F	1 D	1877	I	175	Nov. '97	
Norwegian M. E	Stoughton, Dane Co	B	2 D	1866	..	150	.. ..	
Congregational	Sturgeon Bay, Door Co	F	3 D	1890	O	800	July '97	
German Lutheran	Sturgeon Bay, Door Co	F	1 D	1892	I	200	.. ..	S O
Moravian	Sturgeon Bay, Door Co	F	2 D	1877	..	450	.. ..	
Methodist Episcopal	Sturgeon Bay, Door Co	F	1 D	1884	..	100	.. ..	
Norwegian Lutheran	Sturgeon Bay, Door Co	B	1 D	1886	..	100	.. ..	
St. Joseph's Catholic	Sturgeon Bay, Door Co	B	2 D	1888	O	800	.. ..	
Baptist	Sun Prairie, Dane Co	B		1868	I	250	Dec. '97	
Catholic	Sun Prairie, Dane Co	B		1886	O	450	.. ..	
Methodist Episcopal	Sun Prairie, Dane Co	B		1874	I	300	.. ..	
Presbyterian	Sun Prairie, Dane Co	F		1886	O	300	.. ..	
Baptist	Sparta, Monroe Co	B	3 D	1895	I		Nov. '97	S O
Congregational	Sparta, Monroe Co	B	4 D	1891	O & I		.. ..	S O
St. Abasius Catholic	Sauk City, Sauk Co	B	3 D	1860	O	600	July '98	
Baptist	Sauk City, Sauk Co	F		1892	..	400	Dec. '97	
Congregational	Tomah, Monroe Co	F		1877	I	200	.. ..	
Episcopal	Tomah, Monroe Co	F		1889	O	300	.. ..	
Lutheran	Tomah, Monroe Co	B		1890	O	300	.. ..	
Methodist Episcopal	Tomah, Monroe Co	F		1894	O	400	.. ..	
Evangelical	Two Rivers, Manitowoc Co	B	2 D	1884	..	225	Aug. '97	
Evangelical Lutheran	Two Rivers, Manitowoc Co	B	3 D	1889	..	200	.. ..	
St. Luke's Catholic	Two Rivers, Manitowoc Co	B	4 D	1891	..	1,200	.. ..	
Congregational	Viroqua, Vernon Co	F	3 D	1897	..		Nov. '97	
Episcopal	Viroqua, Vernon Co	F	2 D	1889	..		.. ..	
German Lutheran	Viroqua, Vernon Co	F	3 D	1893	I		.. ..	
First Baptist	Wausau, Marathon Co	B	3 D	1887	O		Nov. '97	
First German Baptist	Wausau, Marathon Co	F	2 D		I		.. ..	
First Presbyterian	Wausau, Marathon Co	B		1896	O		.. ..	
Methodist Episcopal	Wausau, Marathon Co	B		1884	..		.. ..	
St. John's Episcopal	Wausau, Marathon Co		3 D	1888	I		.. ..	
St. Mary's Catholic	Wausau, Marathon, Co	B	3 D	1894	O		.. ..	
St. Michael's Polish Catholic	Wausau, Marathon, Co	B		1895	..		.. ..	
St. Paul Evang	Wausau, Marathon, Co	B		1886	..		.. ..	
St. Stephen's Evang. Lutheran	Wausau, Marathon, Co	F	2 D		..		.. ..	
Swedish M. E	Wausau, Marathon, Co	B		1887	..		.. ..	
Universalist	Wausau, Marathon Co	F			I		.. ..	
Zions Church	Wausau, Marathon Co	B	3 D	1884	O		.. ..	
Catholic	Wauzeka, Crawford Co	F	2 D	1868	I	125	July '98	
German Lutheran	Wauzeka, Crawford Co	F	1 D	1890	O	75	.. ..	
German Methodist	Wauzeka, Crawford Co	F	1 D	1870	I	150	.. ..	

INSPECTION OF CHURCHES—Continued.

Name of Church.	Location.	Frame, brick, stone.	Means of escape.	When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
Episcopal	Washburn, Bayfield Co.	F		1892	O	175	Sep. '97	
German Lutheran	Washburn, Bayfield Co.	F		1890	..	150	.. ..	
Methodist Episcopal	Washburn, Bayfield Co.	F		1895	..	275	.. ..	
Norwegian	Washburn, Bayfield Co.	F		1897	..	250	.. ..	
St. Louis Catholic	Washburn, Bayfield Co.	F		1891	..	270	.. ..	
Swedish	Washburn, Bayfield Co.	F		1890	..	100	.. ..	
Episcopal	Waterloo, Jefferson Co.	F	1 D	1884	I	175	Nov. '97	
Lutheran	Waterloo, Jefferson Co.	B	2 D	1882	O	300	.. ..	
Methodist Episcopal	Waterloo, Jefferson Co.	B	3 D	1856	..	300	.. ..	
Presbyterian	Waterloo, Jefferson Co.	B		1856	..	350	.. ..	
St. Joseph's Catholic	Waterloo, Jefferson Co.	B	2 D	1871	..	350	.. ..	
Brudergemeinde	Watertown, Jefferson Co.	B	2 D	1864	I	250	Aug. '97	S O
Congregational	Watertown, Jefferson Co.	F	2 D	1875	..	225	.. ..	S O
Catholic	Watertown, Jefferson Co.	B	6 D	1873	..	1,500	.. ..	S O
Episcopal	Watertown, Jefferson Co.	B		1876	..	250	.. ..	S O
Evang. Lutheran	Watertown, Jefferson Co.	B	4 D	1857	O	500	.. ..	
Evang. Reformed	Watertown, Jefferson Co.	F	1 D	1895	I	200	.. ..	S O
German M. E.	Watertown, Jefferson Co.	B	2 D	1869	..	200	.. ..	S O
German Protestant	Watertown, Jefferson Co.	B	2 D	1866	..	200	.. ..	S O
Methodist Episcopal	Watertown, Jefferson Co.	B	2 D	1873	..	250	.. ..	S O
St. Henry's Catholic	Watertown, Jefferson Co.	B	4 D	1862	O	1,200	.. ..	
Baptist	Waukesha, Waukesha Co.	S	2 D	1871	..	250	June '97	
Congregational	Waukesha, Waukesha Co.	S	3 D	1867	I	300	.. ..	
Episcopal	Waukesha, Waukesha Co.	S	3 D	1859	I	600	.. ..	S O
Evangelical	Waukesha, Waukesha Co.	B	1 D	1866	I	100	.. ..	
German Reformed	Waukesha, Waukesha Co.	B	2 D	1866	O	200	.. ..	
Methodist Episcopal	Waukesha, Waukesha Co.	S	3 D	1895	O	1,800	.. ..	
Presbyterian	Waukesha, Waukesha Co.	S	2 D	1891	..	400	.. ..	
St. Joseph's Catholic	Waukesha, Waukesha Co.	S	2 D	1888	..	1,200	.. ..	
Congregational	Waupun, Fond du Lac Co.	F		1891	..		Dec. '97	
Dutch Reform	Waupun, Fond du Lac Co.	F		1887	I		.. ..	

Episcopal	Waupun, Fond du Lac Co.	F	....	1871	O	....	Dec. '97	....
Lutheran	Waupun, Fond du Lac Co.	F	....	1857	I	200	.. ..	....
Methodist Episcopal	Waupun, Fond du Lac Co.	....	....	1889	O	....	.. ..	....
St. Joseph's Catholic	Waupun, Fond du Lac Co.	F	....	1865	..	300	.. ..	....
Episcopal	West Bend, Washington Co.	S	2 D	1897	O	200	Sep. '97	....
Evang. Lutheran	West Bend, Washington Co.	B	3 D	1864	O	600	.. ..	....
Evang. Lutheran	West Bend, Washington Co.	F	1 D	1892	I	150	.. ..	S O
Holy Angel Catholic	West Bend, Washington Co.	B	3 D	1866	I	1,200	.. ..	....
Methodist Episcopal	West Bend, Washington Co.	B	2 D	1887	O	175	.. ..	....
Methodist Episcopal	West Bend, Washington Co.	B	2 D	1884	I	250	.. ..	S O
Methodist Episcopal	Weyerhauser, Barron Co.	F	....	1893	O	350	Nov. '97	....
German Lutheran	Wittenburg, Shawano Co.	F	2 D	1890	..	150	.. ..	....
Methodist Episcopal	Wittenburg, Shawano Co.	F	2 D	1890	..	150	.. ..	....
Norwegian Lutheran	Wittenburg Shawano Co.	F	1 D	1890	..	150	.. ..	....
Baptist	Whitewater, Walworth Co.	S	4 D	1886	..	800	.. ..	....
Congregational	Whitewater, Walworth Co.	F	4 D	1881	I	1,200	.. ..	S O
Evangelical	Whitewater, Walworth Co.	F	1 D	1869	I	100	.. ..	....
Lutheran	Whitewater, Walworth Co.	F	2 D	1877	..	300	.. ..	S O
Methodist Episcopal	Whitewater, Walworth Co.	B	2 D	1872	O	1,000	.. ..	....
Norwegian Lutheran	Whitewater, Walworth Co.	F	2 D	1879	I	150	.. ..	....
St. Luke's Catholic	Whitewater, Walworth Co.	F	2 D	1869	..	400	.. ..	S O
St. Patrick's Catholic	Whitewater, Walworth Co.	F	3 D	1879	..	800	.. ..	S O
Universalist	Whitewater, Walworth Co.	F	2 D	1868	..	450	.. ..	S O
Norwegian Lutheran	Westby, Vernon Co.	F	1 D	1892	O	....	.. ..	....

INSPECTION OF SCHOOLS.

The factory inspectors reported on 330 schools in the biennial period covered by this report and reported on their sanitary condition, facilities for escape in case of stampede or fire and other points required by law. Their reports show that the average school building in the state is two stories high, as the buildings are divided into 16.4 per cent. one story high; 74.8 per cent. two stories; 6.9 per cent. three stories, and 1.8 per cent. were not answered on this question. That the school buildings are generally substantially built is evident by the fact that 217 of those visited were built of brick, 11 of stone, and 102 of frame.

While giving careful attention to the sanitary condition of the schools, which was as a rule first-class, especial attention was paid to means of escape. Fire escapes were reported on 29 buildings, which goes to show that the three-story school buildings are supplied with suitable provisions in case of fire. Returns were not made as to the doors on 106 buildings, but the remaining 224 structures have 529 doors.

Strict attention was paid to the means of exit and returns were sent to this office of 247 schools where the doors swung out according to law, but 80 had doors that swung in and 3 were not answered on this question. Orders were given for one fire escape and for changes to be made in 27 doors to allow them to swing out. When the conditions required it other suggestions were made for better ventilation and other improvements.

The seating capacity furnished by 283 of the schools visited is 96,810, and 220 buildings have 56,105 pupils. It will be noticed by a glance at the table that the seating capacity of the schools is but little ahead of the number of pupils, but this is a natural result when the rapid growth of the school system in the state is considered.

The same abbreviations have been used in this table as in the table relating to churches.

Name of School.	Location.	Size of building.	Frame, brick, stone.	MEANS OF ESCAPE.		When erected.	Do doors swing in or out.	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes.						
Public	Albany Green Co.	2 S	B	2	....	1865	I	300	350	Dec. '97	S O
Algoma Public	Algoma, Kewaunee Co.	2 S	..	2	....	1886	O	290	290	July '97	......
Algoma Catholic	Algoma, Kewaunee Co.	2 S	..	2	....	1891	O	......	200	.. ..	......
St. Mary's Catholic	Algoma, Kewaunee Co.	1 S	F	2	....	1878	O	200	500	.. ..	......
St. Paul Lutheran	Algoma, Kewaunee Co.	2 S	B	1	....	1886	I	100	100	.. ..	S O
Amery Graded	Amery, Polk Co.	2 S	..	......	....	1894	I	217	230	.. ..	......
Public	Antigo, Langlade Co.	2 S	..	3	....	1896	O	......	250	Nov. '97	......
Public	Antigo, Langlade Co.	2 S	..	3	....	1896	O	375	400	.. ..	......
Public	Antigo, Langlade Co.	2 S	..	3	....	1893	O	325	400	.. ..	......
Lutheran N. A. C.	Antigo, Langlade Co.	1 S	F	1	....	1877	I	......	50	.. ..	......
St. Johns Catholic	Antigo, Langlade Co.	2 S	B	3	....	1890	O	......	300	.. ..	......
Public	Appleton, Outagamie Co.	2 S	..	3	....	1887	O	......	450	Sep. '97	......
Public	Appleton, Outagamie Co.	2 S	..	2	....	1897	O	......	700	.. ..	......
Public	Appleton, Outagamie Co.	2 S	..	2	....	1864	I	......	300	.. ..	......
Ryan High School	Appleton, Outagamie Co.	2 S	..	3	....	1886	O	800	800	.. ..	......
St. Mary's Catholic	Appleton, Outagamie Co.	2 S	..	3	....	1888	O	......	450	.. ..	......
St. Joseph's Catholic	Appleton, Outagamie Co.	2 S	..	4	....	1880	O	......	750	.. ..	......
St. Paul Lutheran	Appleton, Outagamie Co.	2 S	..	2	....	1893	O	350	500	.. ..	......
Third Ward Public	Appleton, Outagamie Co.	3 S	..	4	....	1890	O	......	850	.. ..	......
Our Lady of Perpetual Help	Arcadia, Trempealeau Co.	2 S	F	......	....	1895	O	191	191	Dec. '97	......
Amberg School	Amberg, Marinette Co.	......	..	......	....	1887	O	......	......	Oct. '97	......
Public	Bangor, La Crosse Co.	2 S	B	......	....	1884	I	230	250	June '97	S O
Public	Bayfield, Bayfield Co.	2 S	S	......	....	1894	O	134	178	Sep. '97	......
Public	Beaver Creek, Outagamie Co.	2 S	F	1	....	1895	O	100	200	Oct. '97	......
St. Mary's Catholic	Beaver Creek, Outagamie Co.	2 S	B	3	....	1890	O	200	250	.. ..	......
Fourth Ward	Beaver Dam, Dodge Co.	2 S	..	......	....	1878	I	250	......	Dec. '97	S O
First Ward	Beaver Dam, Dodge Co.	......	..	......	....	......	I	150	......	.. ..	S O
High School	Beaver Dam, Dodge Co.	2 S	..	......	....	1892	O	160	......	.. ..	......

INSPECTION OF SCHOOLS—Continued.

Name of School.	Location.	Size of building.	Frame, brick stone.	Means of Escape.		When erected.	Do doors swing in or out.	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes						
Third Ward	Beaver Dam, Dodge Co.	2 S	B	......	....	1872	O	150	......	.. ..	......
Union High School	Beaver Dam, Dodge Co.	2 S	..	......	....	1871	I	200	......	.. ..	S O
High School	Beloit, Rock Co.	2 S	..	3	....	1886	O	450	500	Oct. '97	......
Public School	Beloit, Rock Co.	2 S	..	4	....	....	O	......	600	.. ..	......
Public School	Beloit, Rock Co.	2 S	S	4	....	1877	O	......	350	.. ..	......
Second Ward School	Beloit, Rock Co.	2 S	B	2	....	1888	O	......	450	.. ..	......
Public	Benoit, Bayfield Co.	1 S	F	......	....	1892	O	30	33	Sep. '97	......
Catholic	Berlin, Green Co.	2 S	B	......	....	1893	I	100	......	Dec. '97	......
High School	Berlin, Green Co.	3 S	F	......	1	1867	O	510	......	.. ..	......
West Side High	Berlin, Green Co.	2 S	..	......	....	1866	I	250	......	.. ..	......
Public	Birnamwood, Shawano Co.	2 S	..	2	....	1895	O	175	200	Nov. '97	......
Catholic	Brillion, Calumet Co.	2 S	..	2	....	1878	I	......	125	.. ..	......
Public	Brillion, Calumet Co.	2 S	..	3	....	1887	O	......	250	.. ..	......
Public	Brillion, Calumet Co.	1 S	..	2	....	1878	I	......	100	.. ..	......
Public	Brodhead, Green Co.	3 S	B	2	....	1880	O	......	400	Dec. '97	......
Public	Brodhead, Green Co.	2 S	..	2	....	1884	O	......	250	.. ..	......
Public	Burlington, Racine Co.	2 S	..	3	....	1896	O	......	1000	....	......
St. Mary's Catholic	Burlington, Racine Co.	2 S	S	4	....	1852	I	450	600	Aug. '97	S O
St. Johannes	Burlington, Racine Co.	1 S	B	2	....	1892	O	100	125	.. ..	......
High School	Boscobel, Grant Co.	2 S	F	3	....	1898	O	......	400	July '98	......
Public	Boscobel, Grant Co.	2 S	..	3	....	1858	O	......	150	.. ..	......
Evang. Lutheran	Cedarburg, Ozaukee Co.	2 S	..	1	....	1895	O	200	250	July '97	......
Lutheran Trinity	Cedarburg, Ozaukee Co.	2 S	S	2	....	1882	I	75	125	.. ..	......
Public	Cedarburg, Ozaukee Co.	2 S	..	3	....	1895	O	275	450	.. ..	......
Public	Chilton, Calumet Co.	2 S	..	2	....	1870	O	......	400	Aug. [illegible]	......
St. Augustine	Chilton, Calumet Co.	2 S	B	2	....	1878	O	......	200	.. ..	......
St. Mary's Catholic	Chilton, Calumet Co.	2 S	..	4	....	1887	O	375	500	.. ..	......

Public High	Columbus, Columbia Co.	2 S	B	2		1895	O		450	Dec. '97	
German Lutheran	Columbus, Columbia Co.	2 S	F			1897	O	100		.. ..	
Evang. Lutheran	Clintonville, Waupaca Co.	2 S	F	2		1880	I	250	250	.. ..	
Public	Clintonville, Waupaca Co.	2 S	B	2		1895	O	450	600	Oct. '97	
Public	Cashton, Monroe Co.	2 S	B			1882	O		110	Nov. '97	
Public	Cudahy, Milwaukee Co.	2 S	..	2		1895	O	300	350	May '97	
Public	Darlington, Lafayette Co.	2 S	F	2		1888	O	200	225	Nov. '97	
Public	Darlington, Lafayette Co.	2 S	S	3		1868	I		400	.. ..	S O
Public	Delavan, Walworth Co.	2 S	B	6		1892	O		550	Oct. '97	
Public	Edgerton, Rock Co.	2 S	..	2		1892	O		400	Nov. '97	
Public	Eland Junction, Shawano	2 S	..	1		1897	O		175	.. ..	
Public	Elkhorn, Walworth Co.	2 S	..	3		1887	O	475	600	Oct. '97.	
Public	Embarrass, Waupaca Co.	2 S	F	3		1889	I	200	200	.. ..	
High School	Fairchild, Eau Claire Co.	2 S	..			1895	O	300	350	Sept. '97	
Public	Fairchild, Eau Claire Co.	1 S	..			1896	O	60	75	.. ..	
High School	Fox Lake, Dodge Co.	2 S	B			1887	O		300	Dec. '97	
German Lutheran	Fort Atkinson, Jefferson Co.	1 S	F	1		1887	I	75	175	Oct. '97	S O
High School	Fort Atkinson, Jefferson Co.	2 S	B	4			O	400	400	.. ..	
Public	Fort Atkinson, Jefferson Co.	2 S	..	4		1883	I	200	200	.. ..	
Clinton	Fond du Lac, Fond du Lac Co.	1 S	F			1865	I	38	45	Mch. '97	
Fifth Ward School	Fond du Lac, Fond du Lac Co.	1 S	..			1883	O	90	90	.. ..	
First School	Fond du Lac, Fond du Lac Co.	1½ S	..			1875	O	225	250	.. ..	
Grant School	Fond du Lac, Fond du Lac Co.	1 S	..			1889	O	130	160	.. ..	
High School	Fond du Lac, Fond du Lac Co.	2¼ S	B			1872	O	350	450	.. ..	
Lincoln School	Fond du Lac, Fond du Lac Co.	2 S	..			1896	O	120	160	.. ..	
Main Street School	Fond du Lac, Fond du Lac Co.	1 S	F			1879	O	125	125	.. ..	
Second Ward School	Fond du Lac, Fond du Lac Co.	1¼ S	..			1879	O	80	80	.. ..	
Union School	Fond du Lac, Fond du Lac Co.	2½ S	B			1895	O	365	365	.. ..	
Washington School	Fond du Lac, Fond du Lac Co.	2½ S	..			1896	O	475	550	.. ..	
Catholic School	Green Bay, Brown Co.	2 S	..	2		1876	I		500	Aug. 97	S O
High School	Green Bay, Brown Co.	2 S	..	4		1887	O		700	.. ..	
German Lutheran School	Green Bay, Brown Co.	2 S	..	2		1877	O		150	.. ..	
Public School	Green Bay, Brown Co.	2 S	..	4		1881	O		475	.. ..	
Public School	Green Bay, Brown Co.	2 S	..	2		1877	O		400	.. ..	
Public School	Green Bay, Brown Co.	2 S	..	3		1896	O		600		
Public School	Green Bay, Brown Co.	2 S	..	3		1887	O		600	Aug. '97	
Public School	Green Bay, Brown Co.	2 S	..	3		1867	O	400	800	.. ..	
St. John's Catholic	Green Bay, Brown Co.	2 S	..	2		1890	O		800	.. ..	
St. Paul Lutheran	Green Bay, Brown Co.	1 S	F	1		1883	I	50	65	.. ..	
St. Vincent Holland	Green Bay, Brown Co.	2 S	B	2		1880	O		450	.. ..	

INSPECTION OF SCHOOLS.—Continued.

Name of School.	Location.	Size of building.	Frame, brick, stone.	Means of Escape.		When erected.	Do doors swing in or out.	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes.						
Public	Grafton, Ozaukee Co.	1 S	F	2	....	1881	O	75	75	July '97	......
St. Paul Lutheran	Grafton, Ozaukee Co.	2 S	..	2	....	1890	O	......	75	.. ..	......
Public	Hawthorne, Douglas Co.	2 S	..	......	....	1885	I	86	85	Oct. '97	......
Public	Hartford, Washington Co.	2 S	B	2	....	1893	O	......	600	Aug. '97	......
Public	Hartford, Washington Co.	2 S	..	1	....	....	I	......	275	.. ..	......
St. Kilian	Hartford, Washington Co.	2 S	..	1	....	1880	O	......	150	.. ..	......
Public	Houghton, Bayfield Co.	1 S	F	......	....	1893	....	20	80	Sept. '97	......
Public	Horicon, Dodge Co.	2 S	B	......	....	....	I O	236	......	Dec. '97	......
Evang. Lutheran	Hortonville, Outagamie Co.	1 S	F	2	....	1880	I	125	150	Oct. '97	......
Public	Hortonville, Outagamie Co.	2 S	..	1	....	1875	I	......	175	.. ..	......
Polish Catholic	Independence, Trempealeau Co.	2 S	B	......	....	1890	O	200	225	Dec. '97	......
Public	Independence, Trempealeau Co.	2 S	..	2	....	1892	O	......	158	.. ..	......
United Norwegian Lutheran	Independence, Trempealeau Co.	1 S	F	......	....	1887	O	75	150	.. ..	......
Evang. Lutheran	Jefferson, Jefferson Co.	1 S	B	1	....	1880	I	100	150	Oct. '97	......
Public	Jefferson, Jefferson Co.	2 S	..	2	....	1878	O	......	250	.. ..	......
Public	Jefferson, Jefferson Co.	3 S	B	4	1	1880	O	......	600	Oct. '97	......
St. Johannes Catholic	Jefferson, Jefferson Co.	2 S	..	2	....	1885	O	......	200	.. ..	......
Holy Cross	Kaukauna, Outagamie Co.	2 S	..	2	....	1886	O	300	450	Sept. '97	......
Lutheran	Kaukauna, Outagamie Co.	1 S	..	2	....	1878	I	75	125	.. ..	......
Public	Kaukauna, Outagamie Co.	2 S	..	3	....	1890	O	......	800	.. ..	......
Public	Kaukauna, Outagamie Co.	2 S	..	3	....	1897	O	......	650	.. ..	......
Holy Rosary Catholic	Kewaunee, Kewaunee Co.	2 S	..	2	....	1880	I	100	150	July '97	......
Lutheran	Kewaunee, Kewaunee Co.	1 S	F	2	....	1881	I	100	125	.. ..	......
Public	Kimball, Iron Co.	1 S	..	......	....	1887	I	10	24	Nov. '97	S O
Public	Lake Mills, Jefferson Co.	2 S	B	2	....	1892	O	200	200	.. ..	......
Public	Lake Mills, Jefferson Co.	2 S	..	2	....	1868	I	150	150	.. ..	......
St. John's Catholic	Little Chute, Outagamie Co.	2 S	..	2	....	1885	I	......	200	Sept. '97	S O
Fifth Ward	La Crosse, La Crosse Co.	2 S	..	......	....	1875	O	400	450	Mch. '97	......
German Lutheran	La Crosse, La Crosse Co.	1 S	..	......	....	1888	O	46	46	.. ..	......

Logan Street	La Crosse, La Crosse Co.	2 S	..	......	....	1891	O	400	450	.. ..	......
Lutheran	La Crosse, La Crosse Co.	1 S	..	......	....	1875	O	200	250	.. ..	......
St. James	La Crosse, La Crosse Co.	2 S	..	......	....	1886	O	105	150	.. ..	......
St. Marys	La Crosse, La Crosse Co.	2 S	..	......	....	1872	O	110	120	.. ..	......
St. Michael's Orphan Asylum	La Crosse, La Crosse Co.	2 S	..	......	....	1875	I	95	100	.. ..	......
St. Ames' Orphan Asylum	La Crosse, La Crosse Co.	2 S	..	......	....	1889	I	90	100	.. ..	......
Seventh District	La Crosse, La Crosse Co.	2 S	..	......	....	1887	O	598	598	.. ..	......
The Little White School	La Crosse, La Crosse Co.	1 S	F	......	....	1891	O	110	120	.. ..	......
Wood Street	La Crosse, La Crosse Co.	1 S	..	......	....	....	O	80	100	.. ..	......
Loyal Public	Loyal, Clark Co.	2 S	B	......	....	1885	I	200	225	June '98	S O
District No. 4	Manitowoc, Manitowoc Co.	2 S	..	2	....	1897	O	......	300	Aug. '97	......
Evang. Lutheran	Manitowoc, Manitowoc Co.	2 S	..	4	....	1891	O	600	800	.. ..	......
High School	Manitowoc, Manitowoc Co.	3 S	..	3	2	1872	O	......	600	.. ..	......
Public School	Manitowoc, Manitowoc Co.	2 S	..	4	....	1882	O	800	800	.. ..	......
Sixth Ward	Manitowoc, Manitowoc Co.	2 S	..	2	....	1892	O	650	850	.. ..	......
Third Ward	Manitowoc, Manitowoc Co.	2 S	..	2	....	1891	O	......	900	.. ..	......
St. Boniface Catholic	Manitowoc, Manitowoc Co.	2 S	..	2	....	1887	O	......	800	.. ..	......
St. Mary Catholic	Manitowoc, Manitowoc Co.	2 S	F	2	....	....	O	......	200	.. ..	......
Garfield	Marinette, Marinette Co.	2 S	..	4	....	1890	O	......	600	Oct. '97	......
Lincoln	Marinette, Marinette Co.	2 S	..	2	....	1893	O	......	600	.. ..	......
Public	Marinette, Marinette Co.	2 S	B	2	....	1895	O	600	650	.. ..	......
Public	Marinette, Marinette Co.	2 S	..	2	....	1894	O	......	800	.. ..	......
Our Lady of the Lord	Marinette, Marinette Co.	2 S	..	2	....	1888	O	275	300	.. ..	......
Union School	Marinette, Marinette Co.	2 S	..	3	....	1885	O	......	800	.. ..	......
Public	Mason, Bayfield Co.	2 S	F	......	....	1897	I	90	90	.. ..	S O
Lutheran	Mayville, Dodge Co.	....	..	......	....	1893	O	......	200	Dec. '97	......
Public	Mayville, Dodge Co.	....	S	......	....	1880	O	400	......	.. ..	......
High School	Medford, Taylor Co.	2 S	B	......	....	1888	O	300	325	Nov. '97	......
Second Ward School	Medford, Taylor Co.	1 S	F	......	....	1895	O	46	75	.. ..	......
West Side School	Medford, Taylor Co.	2 S	..	......	....	1877	I	139	160	.. ..	......
High School	Menasha, Winnebago Co.	2 S	B	4	....	1896	O	......	800	Sept. '97	......
Public	Menasha, Winnebago Co.	2 S	..	2	....	1896	O	......	225	.. ..	......
Public	Menasha, Winnebago Co.	2 S	..	2	....	1888	O	......	400	.. ..	......
St. Patrick's Catholic	Menasha, Winnebago Co.	2 S	..	......	....	1880	I	325	450	.. ..	S O
St. Mary's Catholic	Menasha, Winnebago Co.	2 S	..	2	....	1893	O	500	650	.. ..	......
German Lutheran	Menomonee, Dunn Co.	1 S	F	......	....	1891	I	102	105	Aug. '97	......
St. Paul Lutheran	Menomonee, Dunn Co.	1 S	..	......	....	1880	I	75	80	.. ..	......
Concordia College	Milwaukee, Milwaukee Co.	3 S	B	4	2	1882	O	85	130	Jan. '97	......
Concordia College No. 2	Milwaukee, Milwaukee Co.	2 S	..	3	3	1890	O	60	60	.. ..	......

INSPECTION OF SCHOOLS.—Continued

Name of School.	Location.	Size of building.	Frame, brick, stone.	Means of Escape.		When erected.	Do doors swing in or out	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Door.	Fire escapes.						
Concordia College No. 3	Milwaukee, Milwaukee Co.	2 S	F	1	1	1887	O	70	......	.. ..	......
Fifteenth District	Milwaukee, Milwaukee Co.	2 S	B	2	....	1885	O	525	550	.. ..	......
Fifteenth District	Milwaukee, Milwaukee Co.	2 S	..	3	....	1892	O	475	500	.. ..	......
Fifteenth District	Milwaukee, Milwaukee Co.	2 S	..	2	....	1888	O	525	525	.. ..	......
Holy Name	Milwaukee, Milwaukee Co.	2 S	F	2	....	1876	O	200	200	.. ..	......
Holy Name	Milwaukee, Milwaukee Co.	2 S	B	3	....	1870	I	100	125	.. ..	......
Holy Rosary	Milwaukee, Milwaukee Co.	2 S	..	2	1	1893	O	150	200	.. ..	......
Holy Rosary	Milwaukee, Milwaukee Co.	2 S	..	2	2	1885	O	130	180	.. ..	......
Jesu	Milwaukee, Milwaukee Co.	2 S	..	4	3	1870	I	200	200	.. ..	......
North Milwaukee	Milwaukee, Milwaukee Co.	2 S	..	2	....	1891	O	600	700	May '97	......
South Milwaukee	Milwaukee, Milwaukee Co.	2 S	..	3	....	1893	O	400	450	.. ..	......
Second District	Milwaukee, Milwaukee Co.	2 S	..	2	....	1866	O	250	250	Jan. '97	......
Second District	Milwaukee, Milwaukee Co.	3 S	B	3	1	1889	O	900	900	.. ..	......
Sixth District	Milwaukee, Milwaukee Co.	2 S	..	3	3	1886	O	725	725	.. ..	......
St. Johannes	Milwaukee, Milwaukee Co.	2 S	..	2	....	1887	O	300	400	.. ..	......
St. Mathews	Milwaukee, Milwaukee Co.	1 S	..	2	....	1865	O	325	350	.. ..	......
St. Marcus	Milwaukee, Milwaukee Co.	2 S	F	3	2	1894	O	340	600	.. ..	......
St. Paul	Milwaukee Milwaukee Co.	2 S	B	2	....	1889	O	550	575	.. ..	......
St. Paul Chapel	Milwaukee, Milwaukee Co.	2 S	..	3	....	1889	O	140	150	.. ..	......
St. Rose	Milwaukee, Milwaukee Co.	2 S	..	3	....	1893	O	230	250	.. ..	......
Public	Milton Junction, Rock Co.	2 S	B	3	....	1888	O	......	350	Nov. '97	......
Public	Mineral Point, Iowa Co.	1 S	..	2	....	1877	O	......	600	.. ..	......
Public	Mineral Point, Iowa Co.	1 S	F	2	....	1878	I	100	100	.. ..	......
Public	Monroe, Green Co.	2 S	B	2	....	1883	O	......	400	Dec. '97	......
Public	Monroe, Green Co.	2 S	..	2	....	1895	O	200	250	.. ..	......
Public	Monroe, Green Co.	2 S	B	2	....	1892	O	......	350	Dec. '97	......
Public	Monroe, Green Co.	3 S	..	3	....	1871	O	......	350	.. ..	......
Public	Marion, Waupaca Co.	2 S	F	3	....	1884	O	......	200	Nov. '97	......
Public	Monticello, Green Co.	1 S	..	2	....	1891	I	......	200	Dec. '97	S O

Public	Merrill, Lincoln Co.	1 S	F			1872	O	420		Nov. '97	
High School	Mauston, Juneau Co.	2 S	B				O	380		Dec. 97	
St. Patrick's	Mauston, Juneau Co.	2 S	..				O			.. ..	
Public	Mauston, Juneau Co.	2 S	F			1894	O	100		Nov. '97	
Mosinee School	Mosinee, Marathon Co.	2 S	..	1		1874	I	100		Oct. '97	S O
St. Johns Catholic	Marshfield, Wood Co.	2½ S	B	1		1897	O	466	586	Feb. '98	
Fifth Ward Public	Madison, Dane Co.	2 S	..			1870	1	403	415	Mch. '98	
First Ward Public	Madison, Dane Co.	2½ S	..				O	245	290	.. ..	
Fourth Ward Public	Madison, Dane Co.	2 S	..			1866	I	196	200	.. ..	
Greenbush Public	Madison, Dane Co.	2 S	..			1891	O	84	89	.. ..	
Holy Redeemer Catholic	Madison, Dane Co.	2½ S	..			1892	O	388	398	.. ..	
St. John's Lutheran	Madison, Dane Co.	1 S	F			1873	I	53	80	.. ..	
St. Raphael's Primary	Madison, Dane Co.	2 S	B			1870	I	165	180	.. ..	S O
St. Raphael's	Madison, Dane Co.	2½ S	..			1893	O	140	150	.. ..	
Second Ward Public	Madison, Dane Co.	2 S	..			1867	I	320	320	.. ..	
Sixth Ward Public	Madison, Dane Co.	2 S	..			1894	O	423	414	.. ..	
Third Ward Public	Madison, Dane Co.	2 S	..			1887	O	353	400	.. ..	
Catholic School	Mazomanie, Dane Co.	1 S	F	1			I		75	July '98	
Public School	Mazomanie, Dane Co.	2 S	B	5		1873	I		325	.. ..	
Public School	Necedah, Juneau Co.	2 S	F				I			Dec. '97	
Fourth Ward School	Neenah, Winnebago Co.	1 S	..	2		1880	I		300	Sept. '97	
High School	Neenah, Winnebago Co.	2 S	B	3		1884	O		800	.. ..	
Second Ward School	Neenah, Winnebago Co.	2 S	..	3		1893	O	600	600	.. ..	
Third Ward School	Neenah, Winnebago Co.	2 S	..	2		1890	O		800	.. ..	
Trinity Lutheran	Neenah, Winnebago Co.	2 S	..	1		1893	O	200	225	.. ..	
Public	New London, Waupaca Co.	2 S	F	6		1876	O	300	400	Oct. '98	
St. Joseph's Catholic	New London, Waupaca Co.	2 S	B	2		1885	I	275	300	.. ..	
Public	Norrie, Marathon Co.	1 S	F	2		1888	O		150	Nov. '97	
Nekoosa School	Nekoosa, Wood Co.	1 S	..	1		1894	O	70		.. ..	
High School	Oakfield, Fond du Lac Co.	2 S	..			1893	O	199	200	July '97	
Evang. Lutheran School	Oconto, Oconto Co.	1 S	..	1		1866	I	75	85	Oct. '97	
High School	Oconto, Oconto Co.	3 S	B			1894	O		800	.. ..	F E
Jefferson Public School	Oconto, Oconto Co.	2 S	..	2		1879	I	150	200	.. ..	
Lincoln Public School	Oconto, Oconto Co.	2 S	F	2		1885	O	225	250	.. ..	
Public School	Oconto, Oconto Co.	2 S	B	2			I		175	.. ..	
St. Joseph's Catholic	Oconto, Oconto Co.	1 S	F	2		1877	I	300	350	.. ..	S O
Catholic Academy	Oshkosh, Winnebago Co.	3 S	B			1873	O	600	900	Feb. '97	
Eleventh Ward	Oshkosh, Winnebago Co.	2 S	..			1875	O	425	500	.. ..	
Evang. Lutheran	Oshkosh, Winnebago Co.	2 S	F			1885	O	113	130	.. ..	
First Ward	Oshkosh, Winnebago Co.	2 S	B			1889	O	350	444	.. ..	

INSPECTION OF SCHOOLS.—Continued

Name of School.	Location.	Size of building.	Frame, brick, stone.	Means of Escape.		When erected.	Do doors swing in or out.	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes.						
Fourth Ward	Oshkosh, Winnebago Co.	2 S	B	......	....	1875	O	350	450	Feb. '97	......
Fifth Ward	Oshkosh, Winnebago Co.	2 S	..	......	....	1875	O	350	400	.. ..	......
High School	Oshkosh, Winnebago Co.	2 S	..	......	....	1867	O	375	500	.. ..	......
Roman Catholic	Oshkosh, Winnebago Co.	2 S	F	......	....	1875	I	200	200	.. ..	......
Sixth Ward	Oshkosh, Winnebago Co.	2 S	B	......	....	1869	O	300	350	.. ..	......
Smith School	Oshkosh, Winnebago Co.	2 S	..	......	....	1896	O	200	200	.. ..	......
Twelfth Ward	Oshkosh, Winnebago Co.	1 S	F	......	....	1871	O	100	150	.. ..	......
Public School	Park Falls, Price Co.	2 S	..	......	....	1896	O	117	150	Nov. '98	......
Evang. Lutheran	Peshtigo, Marinette Co.	1 S	..	1	....	1871	I	50	50	Oct. '98	......
Public School	Peshtigo, Marinette Co.	2 S	..	2	....	1897	O	......	200	.. ..	......
Public School	Peshtigo, Marinette Co.	2 S	..	1	....	1887	I	125	125	.. ..	......
Public	Peshtigo, Marinette Co.	2 S	F	1	....	1889	O	125	125	Oct. '97	......
St. Mary's Catholic	Peshtigo, Marinette Co.	2 S	F	2	....	1872	I	......	100	.. ..	......
Public	Platteville, Grant Co.	2 S	B	2	....	1877	O	200	250	Dec. '97	......
Public	Platteville, Grant Co.	2 S	..	3	....	1884	O	......	400	.. ..	......
Public	Platteville, Grant Co.	1 S	F	2	....	1885	O	175	200	.. ..	......
Evang. Lutheran	Plymouth, Calumet Co.	2 S	..	2	....	1890	O	......	150	Aug. '97	......
High School	Plymouth, Calumet Co.	2 S	B	2	....	1893	O	400	500	.. ..	......
Public	Port Washington, Ozaukee Co.	2 S	..	3	....	1894	O	......	600	....	......
Public	Port Washington, Ozaukee Co.	2 S	..	1	....	1894	O	......	800	Aug. '97	......
St. Mary's Catholic	Port Washington, Ozaukee Co.	2 S	..	4	1	1895	O	300	350	.. ..	......
Public	Prentice, Price Co.	1 S	..	......	....	1892	O	100	130	Nov. '97	......
Public	Phillips, Price Co.	2 S	F	......	....	1894	O	450	450	.. ..	......
High School	Prairie du Chien, Crawford Co.	2 S	B	2	....	1896	O	475	600	July '98	......
Public	Prairie du Chien, Crawford Co.	2 S	..	4	....	....	I O	......	500	.. ..	......
St. Gabriel Catholic	Prairie du Chien, Crawford Co.	2 S	..	2	....	1892	O	275	300	.. ..	......
Public	Reedsville, Manitowoc Co.	3 S	..	1	....	1895	O	......	300	Nov. '97	......

Public	Rib Lake, Taylor Co.	2 S	F	......	....	1894	O	180	180	Nov. '97	......
Ripon College	Ripon, Fond du Lac Co.	3 S	S	......	....	1858	I	......	......	Dec. '97	......
Ripon College	Ripon, Fond du Lac Co.	3 S	S	......	....	1855	O	......	......	.. ..	......
Ripon College	Ripon, Fond du Lac Co.	3 S	B	......	2	1887	O	14	......	.. ..	......
Ripon College	Ripon, Fond du Lac Co.	3 S	..	......	....	1867	O	......	......	.. ..	......
High School	Richland Center, Richland Co.	2 S	..	4	....	1885	O	......	600	July '97	......
Public School	Richland Center, Richland Co.	2 S	F	2	....	....	O	......	250	.. ..	......
Saxon School	Saxon, Iron Co.	1 S	..	......	....	1897	O	......	60	June '97	......
Public School	Schlessingerville, Washington Co.	1 S	B	2	....	1881	O	......	200	Aug. '97	......
St. Mary's Catholic	Schlessingerville, Washington Co.	2 S	..	1	....	1882	I	......	200	.. ..	......
Public	Seymour, Outagamie Co.	2 S	F	......	....	1892	O	250	260	Dec. '97	......
Catholic	Shawano, Shawano Co.	2 S	..	2	....	1879	I	......	200	Oct. '97	S O
Public	Shawano, Shawano Co.	2 S	B	2	....	1893	O	......	400	.. ..	......
Public	Shullsburg, La Fayette Co.	2 S	..	3	....	1878	O	400	450	Dec. '97	......
High School	Stoughton, Dane Co.	2 S	..	3	....	1892	O	225	250	Nov. '97	......
Public	Stoughton, Dane Co.	2 S	..	1	....	1876	I	......	250	.. ..	S O
Holy Guardian	Sturgeon Bay, Door Co.	2 S	..	2	....	1888	O	200	250	July '97	......
Public	Sturgeon Bay, Door Co.	2 S	..	1	....	1886	O	200	300	.. ..	......
Public	Sturgeon Bay, Door Co.	2 S	..	2	....	....	O	175	250	.. ..	......
Public	Schofield	....	F	4	....	1873	I O	......	110	Oct. '97	......
Public	Sun Prairie, Dane Co.	2 S	B	......	....	1868	I	200	......	Dec. '97	......
St. Abasins Catholic	Sauk City, Sauk Co.	2 S	..	2	....	1862	O	......	250	July '98	......
Public	Tigerton, Shawano Co.	2 S	..	2	1	....	O	150	200	Nov. '97	......
Public	Tomah, Monroe Co.	2 S	..	......	....	1889	O	400	......	Dec. '97	......
Evang. Lutheran	Two Rivers, Manitowoc Co.	1 S	F	1	....	1888	O	75	75	Aug. '97	......
Public	Two Rivers, Manitowoc Co.	2 S	..	4	....	1862	O	600	650	.. ..	......
Public	Two Rivers, Manitowoc Co.	2 S	B	2	....	1892	O	150	175	.. ..	......
St. Lukes Catholic	Two Rivers, Manitowoc Co.	2 S	F	2	....	1878	I	......	100	.. ..	......
St. Lukes Catholic	Two Rivers, Manitowoc Co.	2 S	..	2	....	1887	O	200	250	.. ..	......
High School	Tomahawk, Lincoln Co.	1 S	B	......	....	1888	O	200	......	Nov. '97	......
Public School	Tomahawk, Lincoln Co.	1 S	F	......	....	1887	O	100	......	.. ..	......
Third Ward	Tomahawk, Lincoln Co.	1 S	..	......	....	1892	O	200	......	.. ..	......
High School	Viroqua, Vernon Co.	2 S	S	1	....	....	O	235	......	.. ..	......
High School	Viroqua, Vernon Co.	2 S	S	4	....	....	O	200	......	.. ..	......
Catholic	Washburn, Bayfield Co.	1 S	F	......	....	1891	O	265	265	Sep. '97	......
Public School	Waterloo, Jefferson Co.	3 S	B	......	....	1897	O	250	......	Dec. '97	......
Public School	Waterloo, Jefferson Co.	3 S	..	3	....	1897	O	......	600	.. ..	......
Public School	Watertown, Jefferson Co.	2 S	..	2	....	1863	O	375	450	Aug. '97	......
Public School	Watertown, Jefferson Co.	2 S	..	5	....	1883	O	......	600	.. ..	......
Public	Watertown, Jefferson Co.	2 S	B	2	....	1884	O	......	600	Aug. '97	......

INSPECTION OF SCHOOLS—Continued.

Name of School.	Location.	Size of building.	Frame, brick, stone.	Means of Escape.		When erected.	Do doors swing in or out.	Number of pupils.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes.						
Public	Watertown, Jefferson Co.	2 S	B	2	....	1871	O	450	450	Aug. '97	......
St. Bernard's Catholic	Watertown, Jefferson Co.	2 S	..	2	....	1892	I	450	600	.. ..	......
St. John's Lutheran	Watertown, Jefferson Co.	2 S	..	3	....	1885	I	......	350	.. ..	S O
St. Henry's Catholic	Watertown, Jefferson Co.	2 S	..	4	....	1868	O	500	650	.. ..	......
St. Marcus	Watertown, Jefferson Co.	2 S	..	2	....	1864	I	175	200	.. ..	S O
High School	Waukesha, Waukesha Co.	2 S	S	5	....	1893	O	......	900	June '97	......
St. Joseph's Catholic	Waukesha, Waukesha Co.	1 S	..	1	....	1844	O	......	150	.. ..	......
North Ward	Waupun, Fond du Lac Co.	2 S	B	2	....	....	....	175	......	Dec. '97	......
South Ward	Waupun, Fond du Lac Co.	....	..	......	....	1872	O	334	......	.. ..	......
West Ward	Waupun, Fond du Lac Co.	2 S	S	......	....	....	I	80	......	.. ..	......
Evang. Lutheran	West Bend, Washington Co.	2 S	F	1	....	1887	I	200	225	Sep. '97	S O
Holy Angel School	West Bend, Washington Co.	2 S	B	2	....	1880	I	600	800	.. ..	S O
Public	West Bend, Washington Co.	2 S	..	3	....	1895	O	450	600	.. ..	......
Public	Weyerhauser, Barron Co.	2 S	F	......	....	1895	I	65	111	Nov. '97	S O
Public	Whitcomb, Shawano Co.	1 S	..	1	....	1895	O	100	125	.. ..	......
Public	Whitewater, Walworth Co.	2 S	B	3	2	1888	O	......	450	.. ..	......
Public	Westby, Vernon Co.	2 S	F	1	....	1895	O	175	......	.. ..	......
Columbia School	Wausau, Marathon Co.	2 S	B	2	....	1885	O	85	......	.. ..	......
Franklin School	Wausau, Marathon Co.	2 S	..	2	....	1894	O	289	......	.. ..	......
Grant School	Wausau, Marathon Co.	2 S	..	2	....	1881	O	116	......	.. ..	......
High School	Wausau, Marathon Co.	2 S	..	3	....	1889	O	292	......	.. ..	......
Humboldt School	Wausau, Marathon Co.	2 S	..	2	1	1871	O	267	......	.. ..	......
Irving School	Wausau, Marathon Co.	2 S	..	1	....	1894	O	285	......	.. ..	......
Lincoln School	Wausau, Marathon Co.	2 S	..	1	....	1892	O	265	......	.. ..	......
Longfellow School	Wausau, Marathon Co.	2 S	..	3	....	1894	O	285	......	.. ..	......
Oral School for Deaf	Wausau, Marathon Co.	2 S	F	......	....	....	....	10	......	.. ..	......
St. Mary's School	Wausau, Marathon Co.	2 S	B	2	....	1889	O	300	......	.. ..	......
Whiting School	Whiting, Portage Co.	1 S	..	2	....	1897	O	16	40	Feb. '98	......
High School	Weyauwega, Waupaca Co.	2 S	F	2	....	1863	I	124	140	.. ..	S O
Public	Wauzeka, Crawford Co.	2 S	..	2	....	1871	I	......	250	July '98	......
Public	Wausaukee, Marinette Co.	1 S	..	......	....	1886	I	300	......	Oct. '97	......

INSPECTION OF HOTELS.

The inspectors looked over and reported on 69 hotels, and especial attention was given to their means of escape in case of fire. Many of the hotels in the state are known to be in first class condition from former reports and the inspectors were able to examine only those that had not been visited previously or were understood to be in need of improvements to comply with the laws. Orders were given to erect 10 fire escapes and to have 15 doors changed to swing outward. In 26 places orders were given to have means of escape posted in the hall ways and rooms.

A total of 2,880 rooms were divided as follows: first floor, 491; second floor, 1,228; third floor, 1,091, and fourth floor, 70. The hotels 2 stories high numbered 12; three stories high 50, and four stories high 7. The daily number of guests averaged 22 or a total of 1,517 for the 69 hotels. The number of servants employed by all these places is 626, and in the next column the location of the servants' rooms is given.

The abbreviations in this table indicating doors swinging in or out, kind of buildings, etc., are the same as used in the preceding tables and explained in Inspection of Churches.

INSPECTION OF HOTELS.

	Name of Hotel.	Location of Hotel.	Height of building.	Stone, brick and wood.	Number of outer doors.	No. of Rooms.			
						First floor.	Second floor.	Third floor	Fourth floor.
1	Commercial House....	Amberg	3	W	3	4	7	18	....
2	Twin Lake House....	Amery, Polk Co............	2	W	2	7	....	....	....
3	The Vivian............	Antigo, Langlade Co......	3	B	2	5	17	18	....
4	Hotel Berg	Arcadia, Trempealeau Co.	3	B	6	7	2	2	....
5	The Goodwin House .	Beloit	4	B	4	6	....	65	....
6	Hotel Bellis	Berlin	3	B	7	9	25	25	....
7	Central Hotel	Chilton, Columbia Co.....	3	B	6	2	28	....	....
8	Taylor House	Chippewa Falls	3	B	11	9	28	32	....
9	Hotel Bertram	Delavan	3	B	3	8	30	....	....
10	Windsor Hotel	Fond du Lac..............	3	B	7	6	11	11	....
11	The Palmer Hotel ...	Fond du Lac..............	4	B S	4	13	44	42	....
12	Higbee House	Ft. Atkinson	3	B	4	....	17	17	....

INSPECTION OF HOTELS—Continued.

	Name of Hotel.	Location of Hotel.	Height of building.	Stone, brick and wood.	Number of outer doors.	No. of Rooms.			
						First floor.	Second floor.	Third floor.	Fourth floor.
13	Hotel Mullen	Grafton	3	B	2	4	6	6	....
14	American House	Green Bay, Brown Co.	3	B	2	6	15	15	....
15	Commercial Hotel	Green Bay, Brown Co.	3	B	3	....	8	7	....
16	Hotel Freeman	Green Bay, Brown Co.	3	B	2	6	14	13	....
17	Hotel Ries	Green Bay, Brown Co.	3	B	3	4	10	10	....
18	The Burton House	Hurley, Iron Co.	3	W	5	6	39	44	....
19	International Hotel	Independence, Buffalo Co	2	W	4	5	19	....	....
20	Hotel Law	La Crosse	3	B	9	7	25	28	....
21	Fay Hotel	La Crosse	3	B	4	4	8	10	....
22	Central House	La Crosse	3	B	3	4	14	16	....
23	Hotel Young	La Crosse	3	B	7	9	15	25	....
24	Park Hotel	La Crosse	3	B	4	4	9	18	....
25	Home Comfort Hotel.	La Crosse	2	B	5	5	18	....	....
26	Parker House	La Crosse	3	B	8	6	8	13	....
27	Cameron House	La Crosse	4	B	5	3	17	20	5
28	North Star Hotel	La Crosse	2	B	5	4	10	....	....
29	Hotel Bronson	La Crosse	3	B	6	3	14	13	....
30	Northwestern House.	Manitowoc	3	B	3	4	12	8	....
31	Williams House	Manitowoc	3	B	3	6	10	16	....
32	Elver House	Madison	3	B	7	12	24	24	....
33	Hotel Van Etta	Madison	4	S	5	15	15	14	....
34	Northwestern Hotel	Madison	3	B	4	4	8	8	....
35	Capital House	Madison	3	B	5	8	20	20	....
36	Hotel Ogden	Madison	3	B	4	4	11	16	....
37	The Park Hotel	Madison	4	B	7	10	24	28	29
38	Thomas House	Marshfield	3	B	6	6	12	14	....
39	Hotel Drake	Mellen, Ashland Co.	3	W	5	12	35	18	....
40	New Merchants	Merrill	2	B	4	5	20	....	....
41	Minoqua House	Minoqua	2	W	4	5	24	....	....
42	Hotel Schantz	New London	3	B	4	7	15	20	....
43	The Elwood Hotel	New London	3	B	4	12	16	20	....
44	Hotel Cascade	Osceola	3	W	6	8	13	9	....
45	Tremont House	Oshkosh	3	B	10	6	31	33	....
46	Fowler House	Oshkosh	2	B	4	4	11	25	....
47	Commercial Hotel	Oshkosh	2	W	9	6	25	....	....
48	Hotel Athearn	Oshkosh	4	S	12	11	30	31	32
49	Revere Hotel	Oshkosh	3	B	10	7	34	34	....
50	Corning House	Portage	3	B	5	12	20	28	....
51	Hotel Columbia	Portage	3	B	4	6	17	17	....
52	Planters Hotel	Portage	3	B	5	25	25	....	....
53	Emder House	Portage	3	B	11	7	18	18	....
54	Hoffman House	Port Washington	3	B	2	....	16	16	....
55	Hotel Stolte	Reedsburg, Wis.	3	B	5	9	19	21	....
56	The Fuller House	Rhinelander, Wis.	3	B	7	7	19	18	....
67	Commercial House	Rib Lake	3	W	7	9	25	25	....
58	Murdock Hotel	Shawano, Wis.	3	B	4	7	19	19	....
59	Hotel Foeste	Sheboygan	3	B	10	22	25	18	....
60	City Hotel	Sheboygan	3	W	7	7	5	5	....
61	Warren House	Sparta	2	W	4	14	20	....	....
62	The Lytle House	Stanley	2	W	5	8	20	....	....
63	Vincent House	St. Croix Falls	3	B	6	5	7	14	....
64	St. Croix House	St. Croix Falls	4	W	3	3	7	15	4
65	St. James Hotel	South Superior	3	W	11	11	25	27	....
66	Irving	Tomahawk	2	W	4	10	28	....	....
67	The Mitchell	Tomahawk	3	B	4	10	31	32	....
68	Park Hotel	Viroqua	2	W	6	7	22	....	....
69	Weiskirchen	West Bend, Washington (	3	B	3	4	12	12	....

INSPECTION OF HOTELS—Continued.

Office number.	Means of escape.	Daily No. of guests.	When established.	Doors swing in or out.	No. of servants.	Location of servants' rooms.	Date of inspection.	Inspector.	Orders issued.
1	Doors	25	1890	I	5	3d floor	Oct. 15, 1897	Long	Fire escapes.
2	Inside stairway, six windows	10	1887	I	3	1st floor	Nov. 19, 1897		S. O. Notices posted.
3	Balconies, wooden fire escape	20	1887	I	4	2d floor	Nov. 5, 1897	Fisher	Fire escape. Notices posted.
4	Iron fire escape	15	1894	O	2	1st floor	Dec. 11, 1897	Williams.	Notices posted.
5	Fire escape, two iron ladders	45		I	14	4th floor	Oct. 22, 1897	Fisher	Notices posted.
6	Stairs and fire escapes	30	1883	I	21	2d and 3d floors	Nov. 6, 1897	Long	
7	Doors	25	1896	I	6	3d floor	Aug 19, 1897	Fisher	Fire escape. Notice posted.
8	Fire escapes	25	1892	I	15	3d floor	Nov. 24, 1897	Williams.	Notices posted.
9	Iron ladders	15	1894	O	4	3d floor	Oct. 22, 1897	Fisher	Notices posted.
10	2 iron fire escapes	25	1879	O	14	N'r hot. in B. bld	Mar. 2, 1897	Williams	Notices posted.
11	3 Iron Fire escapes	50	1867	O	22	2 & 3 floor	Mar. 2, 1897	Williams.	
12	Doors	25	1861	I	6	2d floor	Oct. 16, 1897		Fire escapes. Notices posted.
13	Doors	6	1896	O	2	1st floor	July 28, 1897	Fisher	
14	Iron Fire escape	20		I	6	3rd floor	Aug. 21, 1897	Fisher	
15	2 Iron Fire escapes	20		O	4	2d floor	Aug. 21, 1897	Fisher	Notices posted.
16	1 Iron Ladder	18	1896	I	4	3rd floor	Aug. 20, 1867	Fisher	Notices posted S. O.
17	1 Iron Ladder	12	1896	I	4	2d floor	Aug. 20, 1897	Fisher	Notices posted S. O.
18	Stairways and Doors	15	1883	I	11	2d floor	Nov. 3, 1897	Williams.	
19	Stairways, Doors and Windows	10		I	3	3d floor	Dec. 12, 1897	Williams.	S. O.
20	2 Fire escapes	30	1887	I	17	2 & 3 floor	Mar. 26, 1897	Williams.	
21	1 Iron Fire escape	10	1887	I	3	1st floor	Mar. 26, 1897	Williams.	Notices posted.
22	1 Iron Fire escape	15	1887	O	7	2 & 3 floor	Mar. 26, 1897	Williams.	
23	2 A 1 Fire escapes	15	1867	I	9	2 & 3 floor	Mar. 26, 1897	Williams.	
24	1 Iron Fire escape	20	1884	I	3	2d floor	Mar. 25, 1897	Williams	
25	Stairways in front and back	15	1892	O	2	2d floor	Mar. 16, 1897	Williams.	
26	1 Iron Fire escape	15	1886	O & I	3	1st floor	Mar. 16, 1897	Williams	
27	2 A 1 Fire escapes	30	1880	O & I	30	2, 3 & 4th floor	Mar. 25, 1897	Williams.	
28	Doors and Stairways	5	1875	I	2	2d floor	Mar. 16, 1897	Williams.	
29	2 Fire escapes	30	1887	O	8	1st floor	Mar. 25, 1897	Williams.	
30	1 Iron Fire escape	25	1877	I	6	2d floor	Aug. 9, 1897	Fisher	

INSPECTION OF HOTELS—Continued.

Office number.	Means of escape.	Daily No. of guests.	When established.	Doors swing in or out.	No. of servants.	Location of servants' rooms.	Date of inspection.	Inspector.	Orders issued.
31	2 Iron Fire escapes	35	......	I	12	3rd floor	Aug. 9, 1897	Fisher	
32	3 Iron Fire escapes	......	1897	O	10	2d floor	Mar. 2, 1898	Williams.	
33	Iron Fire escape and stairway	25	1892	I	16	4th floor	Mar. 1, 1898	Williams.	S. O.
34	Iron Fire escape	25	1888	I	2	3rd floor	Mar. 2, 1898	Williams.	S. O. Notices posted.
35	2 Iron Fire escapes	38	1888	I	2	room out	Mar. 1, 1898	Williams.	S. O. Notices posted.
36	1 Iron Fire escape	30	1880	I	10	1st & 2d floor	Mar. 1, 1898	Williams.	
37	3 Iron Fire escapes	......	1870	I	45	2d & 3rd floor	Mar. 3, 1898	Williams.	
38	Iron Fire escape	25	1887	I	8	1st floor	Feb. 14, 1898	Williams.	Notices posted.
39	Stairways, Roof and Porch	100	1896	I	5	2d & 3rd floor	Nov. 1, 1897	Williams.	Fire escapes.
40	Doors and Windows	20	1893	I	5	2d floor	Nov. 5, 1897	Long	
41	Doors, Stairs and Windows	20	1890	I	7	1st & 2d floor	Nov. 3, 1897	Long	
42	Doors and Stairways	20	1897	I	4	3rd floor	Oct. 25, 1897	Fisher	S. O. Fire escape.
43	3 Iron Ladders	20	......	O	6	annex	Oct. 26, 1897	Fisher	Notices posted.
44	1 Ladder on outside	10	1870	I	3	1st, 2d & 3d floor	Nov. 19, 1897	Williams.	S. O. Notices posted.
45	3 Iron Fire escapes	25	1875	O	......	2d & 3rd floor	Feb. 25, 1897	Williams.	
46	4 Stairways and Windows	20	1875	I	9	1st floor	Feb. 26, 1897	Williams	Notices posted.
47	3 Stairways and Windows	20	1884	I	7	Annex	Feb. 26, 1897	Williams.	Notices posted.
48	3 Iron Fire escapes	50	1891	O	40	4th floor & O	Feb. 26, 1897	Williams.	
49	1 Iron and 1 Wooden escape	60	1884	I	18	3rd floor	Feb. 25, 1897	Williams.	Notices posted.
50	1 Fire escape	30	1856	I	14	3d floor	Nov. 19, 1897	Williams.	
51	Doors and balcony	25	1896	O	9	3d floor	......	Long	
52	Doors	30	1897	O	8	1-2-3 floors	Dec. 4, 1897	Long	Fire escape. Notices posted.
53	Fire escape	30	1877	I	15	Annex	Dec 4, 1897	Long	S. O.
54	Iron fire escape	10	1895	I	3	2d floor	Aug. 4, 1897	Fisher	S. O.
55	Ladders to roof and stairway	30	1897	I	6	3d floor	June 14, 1897	Williams.	Fire escape. Notices posted.
56	1 Iron Fire escape	15	1888	I	11	2d and 3d floors	Nov 11, 1897	Williams.	Notices posted.
57	Stairways and Wooden ladders	5	1898	I	3	2d floor	Nov. 30, 1897	Williams.	S. O.
58	1 ladder, 3d floor to ground	18	......	I	6	3d floor	Oct. 29, 1897	Fisher	Notices posted.
59	Fire escape	20	1894	O	20	3d floor	Apr. 7, 1897	Williams.	Notices posted.
60	1 wood escape	8	1894	I	3	3d floor	Apr. 9, 1897	Williams.	

61	Doors	8	1880	O	3	2d floor	June 25, 1897	Williams.	
62	Stairway, porch and doors	......	1890	I	4	1st floor	Nov. 24, 1897	Williams.	S. O.
63	Iron Fire escape	6	1885	I	6	2d and 3d floors	Nov. 20, 1897	Williams.	S. O.
64	Doors, porch and stairways	20	1885	1	1	3d floor	Nov. 20, 1897	Williams.	S. O.
65	Stairway, roof and porch	25	1891	O	4	1st and 3d floors	Sept. 28, 1897	Williams	
66	Doors	25	1891	I	8	2d floor	Nov. 4, 1897	Williams.	
67	4 Fire escapes	15	1896	O	21	2d floor	Nov. 4. 1897	Long.	
68	Doors and windows	15	1870	I	6	2d floor	Nov. 15, 1897	Long.	
69	Doors	8	1897	I	2	1st floor	Sept. 15, 1897	Fisher	Fire escape. Notices posted.

INSPECTION OF HALLS.

In visiting 68 halls, the inspectors found occasion to order 15 doors changed to swing out and five fire escapes erected. Of the places inspected 28 were one story high; 21 were two stories high; 14 were three or more stories high, and 5 were not answered on this question. A large percentage of the halls were of brick, there being 57.3 per cent. of the total constructed of that material; 36.8 per cent. were frame and 5.9 per cent. were stone. The total seating capacity of 57 halls is 34,535 or an average of over 600. The doors on 50 swing out as provided by law but on 18 the doors swing in and orders were given to change these.

The same abbreviations have been used here under the column headed "Frame, Brick, Stone" and "Do doors swing in or out" as in Table relating to churches. The order to have doors swing out is also shown as in the Table relating to churches, while fire escapes ordered are indicated by F. E.

INSPECTION OF HALLS.

Name of hall.	Location.	Size of building.	Frame, brick, stone.	Means of Escape.		When erected.	Do doors swing in or out.	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escape.					
Assembly Hall	Algoma, Kewaunee Co	1 S	F	2		1879	O	1,400	July, 1897	
Episcopal Hall	Algoma, Kewaunee Co	1 S	B	2		1883	I	100	July, 1897	
Appleton Town Hall	Appleton, Outagamie Co	1 S	F	8		1883	I & O	1,500	September, 1897	
Haramania	Appleton, Outagamie Co	2 S	F	2		1889	O	400	September, 1897	
Masonic	Appleton, Outagamie Co	3 S	B		2	1881	I	350	September, 1897	
Opera	Appleton, Outagamie Co									
St. Joseph's Catholic	Appleton, Outagamie Co	1 S	B	3		1894	O			
Town Hall	Amberg, Marinette Co	2 S	F			1895	O		October, 1897	
Assembly	Beloit, Rock Co	3 S	B				O	500		F. E.
Assembly	Beloit, Rock Co	3 S	B		1	1889	O	250	October, 1897	
Music	Big Bend, Waukesha Co	2 S	F	2		1896	O	300	September, 1897	
Hund's Opera	Boscobel, Grant Co	1 S	F	2		1881	O	500	July, 1898	2 D.
Assembly	Cedarburg, Ozaukee Co	3 S	S			1885	I	150	July, 1897	S. O.
Washington	Cedarburg, Ozaukee Co	3 S	B	2	1		I	200	July, 1897	S. O.
Opera House	Delavan, Walworth Co	2 S	B	1			O	500		
Opera House	Darlington, Walworth Co	3 S	B	2		1885	I	800		
Assembly	Green Bay, Brown Co	3 S	B		1	1896	I	300	August, 1897	F. E. & S. O.
Christ Episcopal	Green Bay, Brown Co	1 S	F	2		1880	I	100	August, 1897	
St. Patricks	Green Bay, Brown Co	2 S	F	2		1882	O	300	August, 1897	
Turner	Green Bay, Brown Co	2 S	B	2		1875	O	1,800	August, 1897	
Y. M. C. A	Green Bay, Brown Co	2 S	B	2		1891	O	300	August, 1897	
Turner	Hartford, Washington Co	2 S	F	2		1875	I	350	August, 1897	S. O.
German	Independence, Trempealeau Co	2 S	F	1		1884	I	200	December, 1897	S. O.
Opera	Independence, Trempealeau Co	2 S	B	2		1889	I		December, 1897	S. O.
Assembly	Kewaunee, Kewaunee Co	3 S	B	1		1880	I	150	July, 1897	S. O.
Loyal Opera	Loyal, Clark Co	1 S	F			1894	I	400	June 1897	S. O.
Armory Hall	La Crosse, La Crosse Co	1 S	B			1875	O	800	March, 1897	
Y. M. C. A	La Crosse, La Crosse Co	2 S	B			1885	O	300	March, 1897	
Assembly	Manitowoc, Manitowoc Co	1 S	B	3		1884	O	1,200	August, 1897	
Assembly	Manitowoc, Manitowoc Co	3 S	B		1	1887	I & O	500	August, 1897	

INSPECTION OF HALLS—Continued.

Name of hall.	Location.	Size of building.	Frame, brick and stone.	MEANS OF ESCAPE.		When erected.	Do doors swing in our out?	Seating capacity.	Date of inspection.	Orders.
				Doors.	Fire escapes.					
Turner Hall	Manitowoc, Manitowoc Co	1 S	B	4	......	1878	O	900	Sept., 1897	
Bohemian Hall	Milwaukee, Milwaukee Co	3 S	S	5	......	1895	O	600	Jan., 1897	
Gymnasium Hall	Milwaukee, Milwaukee Co	1 S	F	2	......	1895	O	....	Jan., 1897	
Pabst Theatre	Milwaukee, Milwaukee Co	3 S	S	4	......	1895	O	1,900	Jan., 1897	F. E.
Recreation Hall	Milwaukee, Milwaukee Co	1 S	F	4	......	1885	O	1,000	Jan., 1897	
Opera Hall	Monroe, Green Co	1 S	B	2	......	1861	I	400	Dec., 1897	S. O.
Turner Hall	Monroe, Green Co	1 S	B	2	......	1875	O	500	Dec., 1897	
Opera	Merrill, Lincoln Co	....	B	......	......	1886	O	....	Nov., 1897	
Opera	Menasha, Winnebago Co	2 S	F	2	......	....	I	400	Sept., 1897	S. O.
Temple Hall	Mosinee	....	F	1	......	1885	I	....	Oct., 1897	S. O.
Opera	Marshfield, Wood Co	1 S	B	2	......	1887	I & O	1,000	Feb., 1898	
Grand Opera	New London, Waupaca Co	1 S	B	3	......	1893	O	800	Oct., 1897	
New London Opera	New London, Waupaca Co	2 S	B	2	......	....	O	800	Oct., 1897	
Episcopal Hall	Oconto, Oconto Co	1 S	F	2	......	1871	I	175	Oct., 1897	
Oconto Opera	Oconto, Oconto Co	2 S	B	2	......	1892	O	600	Oct., 1897	
Turner Opera	Oconto, Oconto Co	2 S	B	5	......	1889	O	1,000	Oct., 1897	
Grand Opera	Oshkosh, Winnebago Co	....	B	8	......	1882	....	1,050	Feb., 1897	
Culver's Hall	Oakfield, Fond du Lac Co	2 S	F	2	......	1890	I	450	July, 1897	S. O.
Opera Hall	Port Washington, Ozaukee Co	1 S	F & B	5	......	1886	I & O	800	Aug., 1897	
St. Mary's Catholic Hall	Port Washington, Ozaukee Co	1 S	B	2	......	1860	O	1,000	Aug., 1897	
Lyceum Hall	Plymouth, Calumet Co	1 S	F & S	3	......	1871	O	500	Aug., 1897	
Turner Hall	Plymouth, Calumet Co	1 S	F	6	......	1870	O	400	Aug., 1897	
Y. M. C. A	Plymouth, Calumet Co	3 S	B	......	......	1894	I	200	Aug., 1897	S. O. & F. E.
Ripon Guards' Hall	Ripon, Fond du Lac	1 S	F	......	......	1897	O	3,000	Nov., 1897	
Stones Opera	Ripon, Fond du Lac Co	....	B	......	......	1882	O	550	November, 1897.	
Opera	Richland Center, Richland Co	2 S	B	2	......	1892	O	300	July, 1898.	
Opera	Rib Lake, Taylor Co.	4 S	F	6	......	1898	O	500	June, 1898	F. E.
Opera	Sturgeon Bay, Door Co.	2 S	B	1	......	1891	O	500	November, 1897	
Library Hall	Tomahawk, Lincoln Co	1 S	F	......	......	1893	O	....	November, 1897.	

Turner Hall	Two Rivers, Manitowoc Co.	1 S	F	4		1887	O	500	November, 1897.	
Rogers & Williams Hall	Viroqua, Vernon Co.	3 S	B	1			O		November, 1897.	
Opera	Waterloo, Jefferson Co.	1 S	F	2		1889	O	500	November, 1897.	
M. E. Hall	Waukesha, Waukesha Co.	1 S	S	3		1862	O	150	June, 1897	
Silurian Casino	Waukesha, Waukesha Co.	1 S	F	2		1891	O	1,250	June, 1897	
Masonic Hall	Watertown, Jefferson Co.	3 S	B		2		I	500	August, 1897	S. O.
Opera	Watertown, Jefferson Co.	2 S	B	5	2	1887	O	500	August, 1897	
Turner Hall	Watertown, Jefferson Co.	2 S	B	5		1861	O	800	August, 1897	
Alexander Hall	Wausau, Marathon Co.	1 S	B	2		1892	O		November, 1897.	
Columbia Hall	Wausau, Marathon Co.		B	3		1892	O		November, 1897.	

SPECIAL INSPECTIONS.

CHILD LABOR.

As already explained the work of inspection was classified as "General" and "Special" inspections. The general inspection embraced practically all the provisions in the laws and was extended as nearly as possible to every factory in the state. The reports of this work showing the condition of the different plants with reference to the factory acts has been presented in the preceding pages of this part. The special inspections related mostly to violations of the child labor law and to the investigation of various complaints that from time to time are made to this bureau. These inspections were mostly limited to places where children are employed, and the greater proportion of the data concerning children 16 years of age or under who were employed in the different places, which was gathered by the inspectors while engaged in this work is presented in the following pages.

The law regulating the labor of children in this state provides that no child under fourteen years of age shall be employed in any factory or workshop unless upon a special permit to this effect granted by the county judge. It is also provided that it shall be the duty of the factory inspectors or other officers of this bureau to enforce this act. The relation of the inspectors to this law is therefore plain. To completely enforce the same, however, has been found very difficult. The reasons for this may primarily be found in the facts that it is so frequently violated and that these violations are, as a rule, very hard to establish.

The reasons why this law is frequently violated are not far to seek. Compare, for instance, the employment of a child under the legal age and the omission to furnish fire-escapes as provided for in the law. In both cases the factory laws are violated. In the first case, however, the dismissal of the child, owing to the frequent fluctuations of employment, and in the number employed as well as to other circumstances, is no bar to the early repeating of this offense. In the second case, when the law is once complied with, or the necessary escape furnished, a new one may not be needed for a very long time to come. Here, therefore, the chances are that another occasion for violating the law may not appear while the building lasts. It is true that in the second case the improvements required may be connected with some expense and that therefore a stronger pressure may be needed to bring it about, while the dismissal of a child involves no expense whatever and is therefore so much more readily complied with, but this does not effect the rule. The chances for illegal employment of children are many times as numerous as the chances for other violations. Hence it is natural that such violations should also outnumber all others.

Violations of the above provisions are also much more difficult to establish than violations of any of the other provisions in the acts. The reasons for this are easily guessed at. The inspectors cannot tell the exact age of a child from its appearance alone. By a common understanding the children themselves, their parents, and not seldom, the employers usually endeavor to deceive the inspectors on this point. Besides this there is in this state a notable lack of reliable or complete birth records. Roundabout and laborious methods are therefore necessary in order to obtain data relating to the ages of children that is so complete as to furnish a safe basis for further proceedings.

As to the looks or general appearance of a child, it is at best an unsafe guide as to its age. Some look older than they really are, others younger. Nothing short of a medical examination is therefore in most cases sufficient to determine from their physical development alone whether a child is really fourteen years or a trifle under this age. Under such circumstances it is not to be expected that the inspectors should be able to form safe opinions from their direct observations alone. It is in this and similar respects that the enforcement of these provisions differ mostly from other acts.

As said, practically all concerned try in one way or another to mislead the inspectors. Few children give the inspectors their correct age unless perhaps under pressure. While the first step to obtain data as to their age consists of a personal examination of the child, this seldom brings the desired result. They are ready enough to answer all questions, but experience soon teaches that the facts given concerning their age cannot be depended upon. As a rule the children do not only studiously misrepresent their age, if younger than the limit fixed by law; but besides this, they also, as a rule, are provided with certificates signed by their parents or others concerned showing that they are fourteen years of age or past regardless of the facts in the case. Cases have even been met with where parents, anxious to either obtain employment for their little ones or to keep them at work, have changed the records of their age in the family bible and other places. Numerous other devices for the purpose of deceiving the inspectors are constantly resorted to. In many cases they produce facts in favor of their position that, on the face of it, are practically indisputable. Added to this is the peculiar and often arbitrary position of the employers themselves. While it seldom appeared that the employers directly encouraged means of this kind, few of them exercised necessary care in this respect. Even children whose appearance alone almost conclusively show that they are under the legal age, are hired without being required to furnish absolute proof as to their age. In many cases they are also both directly and indirectly discouraging the inspectors in their work. The obstacles of all kinds which the inspectors must overcome in order to perform their duties are often both unpleasant and very difficult.

Thus, direct efforts, only, will usually fail to elicit from children and others concerned, the information desired. Further investigation is therefore necessary. To visit their homes and neighbors is usually a waste of time. With full particulars as to the names of the children in question, and of their parents, also of their place of birth and name of school attended, the official record of births and such school records as may be accessible may be examined. The birth records in the different counties however, are so incomplete as to be of comparatively little value. But even if complete they would only afford real assistance in cases where the children were born in the county where found at work. When born elsewhere any search of such records is ordinarily out of the question. Public school records are sometimes accessible and may be correct, but will apply only to such children as have attended the school. As the tables show a large proportion of the children attended parochial schools only, and while the records kept in these schools are usually reliable they are not accessible in every case. While records of the kind mentioned have been of the greatest assistance to us in running down cases of child labor, they cannot always be depended upon or referred to. Thus, it often happens that after exhausting all such means, the inspectors are thrown back upon their own resources. In such cases there is only one course open and that is, to endeavor, by close questioning, to make the children tell the truth. While thus in one way or another all doubts are finally removed, so much time is usually required for this, that it is only just to say, that the present resources of this Bureau are not even sufficient to completely enforce the provisions relating to child labor alone.

What has thus been said shows the nature of the obstacles which the inspectors have had to overcome in enforcing the child labor law, or in other words, why special inspections and work were found necessary to this end. At the same time it also conveys the impression that parents and employers or those who have the say in this matter would not thus go out of their way in securing employment for children under fourteen or to keep them employed unless financially or otherwise interested in them or in the result of their labor. In prosecuting the inspections we have also made inquiries upon these points and a brief discussion of what we have found and the conclusions it leads to may therefore be in order.

Poverty is usually the main cause to which both the children and their parents attribute their efforts to evade the law. Asked concerning it the children usually stated that the family was so poor that their earnings were necessary to its support and that therefore their parents wanted them to go to work. The truth of this statement was not always borne out by the facts. Subsequent investigations often revealed an entirely different condition in their homes. While it was undoubtedly true that the children had sought employment in obedience to their parents' wishes, their earnings were by no means always necessary to their support. As a whole, however, the statement discloses quite plainly the relation of the parents to the employment of their children. The latter are put to work by the former because of the wages they earn. These earnings increase the income of the family by their amount. It is true that this increase is not great. Conditions, however, are not far to seek where, in the minds of the parents, it is considered of greater importance than their obligations to their children as well as to society.

In many cases the earnings of the children were also badly needed by themselves or the family. Investigations showed that in nearly one-half of the cases the father was either permanently or temporarily unable to provide for the family. In some cases this was due to sickness. In others to deaths. In still others to inability to find work and other causes beyond their control. That under such or similar circumstances healthy and strong children when upwards of twelve years of age should be permitted to work a part of each year is perhaps only just. It is at least a fact that such employment wisely directed would prevent or ameliorate much suffering and this without any perceptible injury to the children. In our manufacturing centers there are few families, especially when large, and when the father depends on common labor only for its support, where such assistance as even a child can give has not at one juncture or another been badly needed.

There is also a provision in the law which is intended to cover such cases. The various county judges are namely authorized, when in their opinion the best interest of the family or children demands it, to grant limited permit to work to children who are twelve years of age. If judiciously applied this provision would seem to be a wise one, especially when the other provisions in the act are strictly enforced. It would undoubtedly have covered many of the above cases. If taken advantage of in such cases it would have enabled those affected to enjoy legally and without risks what they tried so hard to enjoy in violation of other provisions. For some reason, however, the majority of those who are entitled to it fail to avail themselves of this privilege. Cases have been met with where the family have undergone many privations rather than to apply for such a permit. On the other hand there are also cases where this privilege has been abused.

Cases were also met with where the employment of children could be traced to bad habits, shiftlessness or lack of thrift on the part of father or parents. In such cases, while the families often suffer from privations of all kinds, radical remedies are needed. The conditions brought about by such causes are usually both lasting and growing. Relief, in order to be of any value, therefore, must be permanent. The temporary employment of children could thus not help matters any, while it possibly might encourage such evils; and to allow children under fourteen to remain at work permanently society cannot afford.

In a large proportion of the cases, however, there appeared no good reason why the children should not have been found at school instead of in the work-shop. Investigations often revealed, that the father was not only working but enjoyed permanent employment. In some cases older children living with the family were also at work, and the family often owned the house in which they lived. The condition generally in their homes gave no traces of want. When under such conditions young children are forced to seek employment it is quite evident that their parents attach greater importance to their small earnings than to their future welfare. For such a course no justification whatever can be found. Thrift is commendable in itself. But when practiced at the expense of both the physical and mental development of the growing generation it is carried much too far. As a rule, parents of this kind will also make greater efforts to find employment for their little ones and resort to more desperate means in order to keep them at work, than those who are in actual need of their help.

The relation of the employers to the employment of children differ in many respects from that of the parents. In almost every case the labor of their children is of some material benefit to the parents. To the employers this is not the case. It is often held that because the wages of the children are low, child labor is cheap labor, and that the employment of such labor results in a low cost of production. This statement needs qualification. Low wages do not, as a rule, mean low cost of production. Skill and efficiency on the part of the worker is often found to more than offset any difference that may exist in the wages paid. In determining whether labor is dear or cheap, efficiency as well as the amount paid in wages, should therefore be taken into account. But even if the question of efficiency is left out and it is admitted that child labor, as a whole, means low cost, the employment of children under fourteen years of age would not, under existing conditions, have this effect. Investigations upon this point show, that children under fourteen were as a rule paid as much for their labor as those who were fourteen and past; and also, that the number of children past the legal limit who sought employment at this wage was fully equal to the demand for such labor. As a rule, the efficiency of a child increases with its age. How under such circumstances any manufacturer can find it profitable to employ children under fourteen years of age is rather hard to explain.

Besides these there are other reasons why employers should find it to their interest to live up to the law regarding child labor. Violations of this law make them liable to prosecutions and fines. In this employers have certainly more at stake than parents, and the risks they are running are therefore much greater. The younger the child, the more deficient it also is in point of judgment and discretion, and, for this reason, requires more attention and watchfullness not only in its work but around delicate and dangerous machinery. When it becomes known to the inspectors that a manufacturer is in the habit of disregarding this law, their visits get more frequent and their inspection much closer. This often results in more or less loss of time and attention on the part of the employees and this is often an item that is worth considering. Many other reasons might be added but enough have been given to show the direction in which their interests lie.

It is thus plain that the interest of employers lies in complying with the law. Regardless of this a great many are very negligent in this respect. When help is needed around their plant the first comer is often hired, without being required to furnish any other proof as to age than their own and parents' certificate.

Children which happen to be relatives of some of their older employees are even shown greater leniency. When thus once in the employ it is usually kept even after found to be under the age. Rather than be caught at this offence many employers when confronted take the side of the child as against the inspectors, thus making it much more difficult to obtain the necessary evidence. During the past year, however, employers have been much more careful in this respect; but this is rather due to the steadily increasing efficiency of the inspectors than to any greater desire on their part to live up to the law. On the other hand employers are sometimes imposed upon. In some cases both parents and children furnish so strong proof, of being of age, that there could hardly be any reason to doubt its trustworthiness but which when run down by the inspectors is found to be made up for the purpose. On the whole, however, the employers are fully able to protect themselves. Through their failure to do so they are, at least, partly responsible for practically every case of child labor.

The facts thus given, while simply such as have come to our notice during the work of inspection, throw much light upon the conditions surrounding the enforcement of the law in question, as well as the relation of parents and employers to the employment of children under fourteen years of age. Concerning the enforcement of this law we have seen that because of misrepresentations on the part of those effected, and of defective birth records, the age of the children is often difficult to ascertain and that therefore special attention and time was required to fully enforce it. As to the relation of parents to the employment of their children we have seen that this relation is very intimate. In many cases the parents were actually dependent upon the addition to their income from this source, and this fact largely accounted for their determined efforts to keep their children children at work. In the case of the employers, it was seen that while they were more or less to blame for violations of the child labor law they could have nothing to gain therefrom from a financial point of view.

As the various means employed for the purpose of misleading the inspectors, as to the age of children, sometimes proved effective, or, at least, left some cases in doubt, more thorough ork in this respect was considered necessary. Accordingly at one of our special visits to the firms where children are mostly employed a complete census of every child sixteen years of age and under was taken. This work involved a large amount of labor and much time, but was productive of good results. It furnished particulars not only of the children themselves but of their surroundings and these in turn enabled us to run down practically all doubtful cases. As a whole, the facts thus gathered also disclose what is needed in the way of legislation in this regard and furnish some valuable material for statistical purposes. The fact is also brought out that, while taken together the number under fourteen who were found at work without permit foot up to quite a figure, it is not as large as expected or currently reported.

This census or investigation was made as broad as time and our facilities for carrying it on allowed. Of the children, it embraces their name and address; the kind of work done; age; date of inspection; where born; hours of labor; wages paid; time employed; with whom living; and school attendance. Of their employers and parents it gives the names and business or occupation. As each child was required to personally certify to the facts thus obtained from it, it also shows the number of children that were able to write their own names. In addition to this, and for comparative purposes, the total number of wage-earners employed by the establishments in question was also obtained. Further illustration of the scope of this investigation may be had from the schedule itself, which is here included for this purpose.

SCHEDULE.

Name of firm where employed........................
....
Kind of goods made ....
Location ....
Full name of child............................
Address ....
Kind of work performed ....
Age .... When born ....

Where born ....
Hours of work daily..............................
Wages received per week........................
How long in present employ.....................
Name and place of business of next previous employer
....
Living with parents..............................
Occupation of father ....
Name of father ....
Attended school........ How long.............
What school ....
Remarks:......................................
....
....
....
I hereby certify that the above answers are correct.
....

As stated already the above schedule was used in this investigation; or, in other words, the questions shown therein were put to each one of the children included and their answers noted. Thus, in inspecting the different establishments in this case, all children sixteen years of age or under employed therein were examined upon these points and all the facts relating thereto obtained. In most cases most of the questions were willingly answered; but now and then a child was met with whose memory seemed rather short, especially was this the case when under the legal age. As the examinations were made by the inspectors directly they were, of course, in position to use their own judgment in such cases. Whenever, therefore, the answers were uncertain or qualified or when there were other reasons to believe that they did not correspond to facts, indirect or outside means were employed to get at the truth. Complete answers were thus obtained in every case and this data furnish the basis for following tabulations.

It should perhaps be noticed that all the facts inquired about in the schedule have not been included in the tabulated reports. Among the facts thus omitted are: Names and addresses; the kind of work done by the children in question, and particulars as to when the child was born. The reasons for not showing names and address are obvious. It is the rule in this Bureau not to publish names, etc., of persons or firms who either furnish data or concerning whom data or facts are gathered unless there is some good reason for doing so. For lack of space the returns for each individual child could not be given. This alone would make the omission of the names of both children and parents practically necessary. The work done by the children employed in the various industries differ so much that no convenient classification could be found under which to include it all, and hence all facts relating to this were left out entirely. Particulars as to the time of birth, such as the date, month, and year, were considered of little importance since the age, expressed in years and fraction of same, are shown in each case. While a few of the facts collected have thus been omitted what has been said show that these omissions do not affect the value of the figures given.

On the other hand some facts have been presented in the tables which were not called for in the schedules. Among these are, those which show the number of children who stated that their father was working and the number who reported upon as to whether their parents owned their home or paid rent for same. As said these facts were not required by the schedule. They bear a close relation, however, to the economic condition in the homes and it was because of their importance in this respect that they were collected. The inspectors often met with cases in which the information wanted had to be gotten in a roundabout way. In such cases the inquires naturally would cover more ground than when each one of the questions were answered promptly. Such additional points as were thus brought out were generally noted down on the schedule to which they appeared. In many cases such inquiries were also prompted by their desire to more fully understand the condition; and the replies were then noted under remarks. All such facts relating to the points mentioned above were collected and tabulated. As the tables show, ethese facts cover only a certain number of cases. This fact, however, does not greatly depreciate their value because in each instance the number of the inquiries made as well as the answers received are known.

As said above each individual schedule or return could not be presented in detail in the descriptive tables. By thus excluding details much that is important in determining the condition both of the individual and the class has undoubtedly been lost. All who are familiar with statistics of this kind know the the importance of many minor facts that cannot be expressed or carried along en masse with the main points. Nevertheles, space would not admit of individual presentation. Since this was out of the question the next best thing had to be resorted to. This was found to be a presentation by establishments. Thus the returns for each of the establishments inspected were compiled and the totals and averages in each case used as the figures for the establishments in question. The different establishments were then classified as to industries. As tables I stands, therefore, it shows for each of the establishments included, the totals and averages of all the facts collected regarding all children sixteen years of age or under, employed therein. Table II shows the aggregates and averages for each industry.

The data thus shown in tables I, II may be described under the following heads:

Total number of employes: By this is meant the total number of wage-earners only—salaried persons were not included—at the date of inspection. This data was furnished by every establishment inspected. It was collected mainly for comparative purposes.

Wage earners 16 *years of age or under*: Under this head in table I are grouped seven columns of figures relating to the number of children 16 years of age or under employed in each one of the establishments included at the time of inspection. The first column in order shows the total number. The next two show the number of males and females. In the fourth place, their average age is given; and in the fifth and sixth the respective number over and under the average age. The last column gives the number under fourteen years of age, or, of those who, unless special permits to that effect had been obtained, were employed against the law.

Hours of labor: By this is meant the hours of labor which constituted a day's work at the time of inspection. Information upon this point was obtained in all cases, and the table shows the length of the working day for each establishment.

Wages: The data in this group relate to the wages paid the children employed in the different plants and industries represented. The tables show in each case, the average, highest and lowest wages paid; also the number of children receiving the average wage or over and the number receiving less than the average. This data is very interesting. It may therefore seem, especially to those who may wish to go into details, that the wages of each individual child ought to have been shown. While detailed presentations would undoubtedly have proved valuable in this as well as in other parts of this table, such presentations were for reasons already explained out of the question. An examination of the figures as given, however, will reveal the fact that they will meet most of the demands that can be made upon them. They have also been collected and compiled with special care and are as far as they go absolutely reliable.

Time in present employ: The figures under this head represent, of the children included in the different establishments, the average number of weeks they had remained in their present employ; the longest and shortest period of employment; the number who served the average time or more and the number who had served less than the average length of working period.

Number having had previous employment: By this is meant the number of children who, previously to their present employment, had worked for some other employer. The figures under the above head therefore show the number of children in each establishment who stated that they had been employed elsewhere before their present place was obtained.

School attendance: Statistics relating to the school attendance are of the greatest importance in all studies of the child labor question. Considerable space has therefore been given to the data collected which related thereto. Two classes of schools, the "Public' and the "Parochial," had been patronized. In most cases it was found that the children had exclusively attended one or the other of these schools. The particulars for each have therefore been presented separately. As the table now stands it shows separately, for the establishments included, the number who attended each of these two classes of schools; the average, longest and shortest periods of school years in attendance, and the number whose schooling exceeded or fell short of the average period. It also shows the number of children and the average attendance in each case of those who patronized both schools, and the number of those who had not attended any school.

Where born: The children included were also classified as to their place of birth. As it was found that they were born either in Wisconsin, other states, or Germany, this classification was adopted.

With whom living: This information relates to the home life of the children investigated. Three columns appear under this head. The first of these shows the number in each establishment who lived with one or both parents. The other two show respectively the number who lived with other relatives than parents or were boarding.

Occupation of father: Full data regarding the occupation or business of the father is of importance in all efforts to study the condition in life of the child. Such data was also gathered. As the facts showed that in practically every case the father was either working at common labor or a trade, only two classifications were necessary. The table includes the number in each case.

SPECIAL INSPECTION—TABLE I.

Running number.	Total wage earners.	WAGE EARNERS 16 OR UNDER.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	*Years.*		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
AGRICULTURAL IMPLEMENTS.									
1	500	13	13	......	15.3	7	6	......	10
2	15	2	2	......	14.5	1	1	......	10
3	650	3	3	......	15.1	2	1	......	10
4	31	2	2	......	14.5	1	1	......	10
5	17	3	3	......	14.3	2	1	1	10
Total and average	1,213	23	23	......	14.7	13	10	1	10
BICYCLES.									
6	120	7	7	......	14.2	3	4	4	10
7	50	11	11	......	14.7	5	6	1	10
8	175	6	6	......	14.6	5	1	......	10
9	23	3	3	......	14.6	1	2	......	10
10	22	7	7	......	14.4	4	3	1	10
11	131	8	8	......	14.9	3	5	......	10
12	300	7	7	......	14.7	4	3	......	10
Total and average	821	49	49	......	14.5	25	24	6	10
BOOTS AND SHOES.									
13	350	29	15	14	15.7	19	10	1	10
14	93	8	4	4	15.	4	4	......	10
15	150	8	7	1	15.1	3	5	......	8
16	35	2	......	2	15.4	1	1	......	9
17	75	5	5	......	13.9	2	3	3	10
18	35	8	4	4	15.	4	4	......	10
19	360	37	23	14	14.8	24	13	3	10
Total and average	1,098	97	58	39	14.9	57	40	7	9.6

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	Wks.	Mos.	Days	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			

AGRICULTURAL IMPLEMENTS.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average (Wks.)	Highest (Mos.)	Lowest (Days)	Average or above.	Under average.	No. having had previous employers.
1	3.60	5.00	2.60	6	7	31.	36	1	3	10	4
2	3.50	4.00	3.00	1	1	32.	14	21	1	1	1
3	3.66	4.00	3.00	1	2	5.	1½	21	2	1	3
4	3.30	3.60	3.00	1	1	8.	4	21	1	1	1
5	3.50	4.50	3.00	1	2	35.6	18	21	1	2	2
Total and average	3.50	4.22	2.92	10	13	22.5	14.7	17	8	15	10

BICYCLES.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average (Wks.)	Highest (Mos.)	Lowest (Days)	Average or above.	Under average.	No. having had previous employers.
6	3.00	3.50	2.50	4	3	21.2	12	2	3	4	......
7	2.77	3.00	2.50	6	5	11.3	12	2	3	8	6
8	3.33	4.00	3.00	3	3	18.	18	6	2	4	1
9	2.17	2.50	2.00	1	2	7.3	3	20	1	2	1
10	2.57	3.00	2.40	2	5	10.	11	6	2	5	6
11	4.12	5.00	3.50	3	5	12.3	12	12	3	5	5
12	4.57	7.00	4.00	3	4	17.3	12	30	2	5	6
Total and average	3.22	4.00	2.84	22	27	13.9	11.4	11.1	16	33	25

BOOTS AND SHOES.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average (Wks.)	Highest (Mos.)	Lowest (Days)	Average or above.	Under average.	No. having had previous employers.
13	2.78	4.00	1.75	15	14	74.7	36	3	6	23	3
14	2.31	2.50	2.00	5	3	26.7	12	18	3	5	2
15	2.81	4.25	2.00	3	5	35.	24	42	4	4	2
16	1.87	2.00	1.75	1	1	51.	14	235	1	1	1
17	1.58	2.00	1.58	1	4	14.2	5	31	3	2	1
18	2.00	3.00	1.25	5	3	35.5	24	18	3	5	5
19	2.52	3.25	2.00	5	32	27.3	28	6	11	26	18
Total and average	2.26	3.00	1.76	35	62	37.7	24.2	52.8	31	66	32

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years.			Average or above.	Below average.	Number attending.	Years.			Average or above.	Below average.	Number attending.	Years.	
		Average.	Highest.	Lowest.				Average.	Highest.	Lowest.				Av. in public.	Av. in parochial.
AGRICULTURAL IMPLEMENTS.															
1	6	7.3	9	5	3	3	7	6.5	8	4	5	2	....	....	....
2	1	7	7	7	1	..	....	....	....	....	....	....	1	4	3
3	1	7	7	7	1	...	1	7	7	7	1	....	1	4	2
4	....	....	....	....	....	...	2	5.5	6	5	1	1	....	....	....
5	3	3.3	8	1	1	2	....	....	....	....	....	....	....	....	....
Total and average	11	6.1	7.7	5.	6	5	10	6.3	7.	5.3	7	3	2	4.	2.5
BICYCLES.															
6	4	5.7	7	4	2	2	2	6.6	6	6	2	....	1	4	3
7	4	6.7	8	5	3	1	6	6.8	8	6	4	2	1	3	3
8	5	7	8	5	3	2	1	4	4	4	1	....	....	....	....
9	2	6.5	7	6	1	1	1	5	5	5	1	....	....	....	....
10	6	7.3	8	7	1	5	1	8	8	8	1	....	....	....	....
11	2	7.5	8	7	1	1	3	7	8	6	1	2	3	2.7	5.3
12	4	7.2	8	7	1	3	....	....	....	....	....	....	3	2	5
Total and average	27	5.8	7.7	5.8	12	15	14	6.2	6.5	5.8	10	4	8	2.9	4.7
BOOTS AND SHOES.															
13	15	7.1	10.	6	3	12	14	6.2	9	4	9	5	....	....	....
14	7	5.9	7	4	6	1	1	6	6	6	1	....	....	....	....
15	4	6.7	8	6	2	2	4	6.2	8	5	2	2	....	....	....
16	....	....	....	....	....	...	2	6.	7	5	1	1	....	....	....
17	3	6.6	9	5	1	2	2	7.5	8	7	1	1	....	....	....
18	2	4.2	7	2	1	1	4	5.2	7	3	2	2	2	4	3.5
19	10	7.1	9	5	5	5	21	6.9	8	5	16	5	6	3.5	5.3
Total and average	41	6.2	8.3	4.6	18	23	48	6.2	7.5	5	32	16	8	3.7	4.4

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent
AGRICULTURAL IMPLEMENTS.												
1	12	.....	1	13	.....	.....	9	4	.....	10	2	5.75
2	2	.....	.....	2	.....	.....	2	.....	.....	2	.....	.....
3	3	.....	.....	3	.....	.....	2	1	.....	.....	.....	.....
4	2	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....
5	3	.....	.....	3	.....	.....	.....	3	.....	.....	.....	.....
Total and average	22	.....	1	23	.....	.....	13	10	.....	12	2	5.75
BICYCLES.												
6	4	.....	3	7	.....	.....	7	.....	.....	2	3	6.33
7	10	.....	1	10	1	.....	9	2	4	5	.....	.....
8	5	.....	1	5	1	.....	5	1	3	3	.....	.....
9	2	.....	1	2	1	.....	3	.....	.....	1	.....	.....
10	5	.....	2	7	.....	.....	3	4	.....	.....	.....	.....
11	3	2	3	8	.....	.....	3	5	.....	.....	.....	.....
12	2	3	2	7	.....	.....	3	4	.....	1	.....	.....
Total and average	31	5	13	46	3	.....	33	16	7	12	3	6.33
BOOTS AND SHOES.												
13	25	3	1	28	1	.....	20	9	15	13	12	8.58
14	7	1	.....	8	.....	.....	8	.....	.....	3	2	5.00
15	6	2	.....	8	.....	.....	7	1	7	5	.....	.....
16	2	.....	.....	2	.....	.....	2	.....	.....	2	.....	.....
17	5	.....	.....	5	.....	.....	4	1	4	4	.....	.....
18	5	.....	3	8	.....	.....	8	.....	.....	.....	.....	.....
19	24	4	9	37	.....	.....	12	25	1	.....	.....	.....
Total and average	74	10	13	96	1	.....	61	36	27	27	14	6.79

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
BOXES (WOODEN AND PAPER).									
20	140	7	7	......	15.6	5	2	......	10
21	102	24	6	18	15.	11	13	1	10
22	110	3	1	2	14.8	1	2	......	10
23	180	58	9	49	14.9	31	27	......	10
24	39	4	4	......	15.3	2	2	......	10
25	130	16	16	......	14.9	11	5	......	10
26	53	3	2	1	14.8	2	1	......	10
27	8	2	2	......	16.7	2	......	......	10
28	110	18	18	......	15.	11	7	......	10
29	42	4	4	......	15.1	1	3	......	10
30	......	21	20	1	15.	11	10	......	10
31	1.00	11	11	......	13.10	5	6	6	10
Total and average	1,014	171	100	71	15.1	93	78	7	10
BRICK.									
32	80	3	3	......	14.6	2	1	......	10
33	55	3	3	......	15.6	2	1	......	10
34	52	9	9	......	14.2	5	4	4	10
35	45	2	2	......	15.1	1	1	......	10
Total and average	232	17	17	......	14.9	10	7	4	10
BROOMS, BRUSHES AND BASKETS.									
36	15	2	2	......	13.8	1	1	1	8
37	19	7	7	......	15.	4	3	......	10
38	17	2	2	......	13.8	1	1	1	10
39	46	7	7	......	14.8	5	2	1	9
Total and average	97	18	18	......	14.3	11	7	3	9.2
CHAIRS.									
40	125	8	8	......	15.	3	5	......	9.6
41	200	37	37	......	14.6	21	16	8	10
42	212	22	15	7	14.6	13	9	6	10
43	96	15	15	......	14.7	10	5	1	10
44	439	22	9	13	15.	13	9	......	10
45	450	25	16	9	14.9	11	14	......	10
46	50	2	2	......	16.2	1	1	......	10
47	450	32	21	11	14.8	22	10	1	10
48	320	20	9	11	14.9	12	8	1	10
49	67	2	2	......	15.5	1	1	......	10
50	560	17	12	5	15.1	10	7	......	10
Total and average	2,969	202	146	56	15.2	117	85	16	9.9

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	Wks.	Mos.	Days	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			
BOXES (WOODEN AND PAPER).											
20	3.07	3.50	3.00	1	6	19.9	8	60	2	5	4
21	2.26	3.90	1.92	9	15	23.3	24	1	8	16	11
22	1.66	1.75	1.50	2	1	2.6	1½	1	1	2	1
23	2.07	3.50	1.25	22	36	23.5	24	1	29	29	18
24	2.55	3.00	2.40	1	3	20.	10	12	1	3	2
25	2.51	3.00	2.40	3	13	24.8	12	1	6	10	.....
26	3.00	3.00	3.00	3	.....	24.6	9	4	2	1	2
27	3.50	3.50	3.50	2	.....	30.5	9	130	1	1	1
28	2.78	3.00	2.40	9	9	9.5	12	3	4	14	7
29	3.00	3.00	3.00	4	.....	10.	6	12	1	3	.....
30	3.55	6.30	2.40	12	9	4.9	6	6	6	15	1
31	2.61	3.00	2.10	8	3	19.3	12	1	5	6	.....
Total and average	2.71	3.31	2.40	76	95	17.7	11.1	19.3	66	105	47
BRICK.											
32	2.76	3.00	2.64	1	2	1.6	2	6	2	1	1
33	3.00	3.00	3.00	3	.....	2.8	3	6	1	2	2
34	3.17	4.50	3.00	1	8	27.4	12	30	3	6	2
35	2.50	2.50	2.50	2	.....	6.5	2	30	1	1	2
Total and average	2.86	3.25	2.78	7	10	9.4	3.8	18.	7	10	7
BROOMS, BRUSHES AND BASKETS.											
36	1.62	2.00	1.25	1	1	20.	8	30	1	1	.....
37	2.70	3.50	2.25	3	4	38.6	12	3	4	3	1
38	2.75	2.75	2.75	2	.....	0.5	4	1	1	1	1
39	2.77	3.00	2.10	5	2	15.	10	6	2	5	3
Total and average	2.46	2.81	2.09	11	7	18.5	7.5	10.	8	10	5
CHAIRS.											
40	2.70	3.00	2.10	4	4	17.	8	1	4	4	.....
41	2.51	3.25	2.00	16	21	4.7	12	2	14	23	4
42	2.08	2.70	1.80	15	7	16.8	24	3	7	15	7
43	2.48	3.00	2.10	3	12	33.3	18	6	6	9	1
44	2.08	2.70	1.80	9	13	28.5	24	1	6	16	6
45	2.03	3.00	1.80	12	13	32.	24	6	9	16	7
46	1.75	2.00	1.50	1	1	2.3	1	1	1	1	1
47	2.38	3.00	1.80	16	16	28.6	12	6	13	19	11
48	2.40	3.60	1.80	13	7	29.5	24	3	7	13	12
49	2.70	3.00	2.40	1	1	52.4	24	6	1	1	1
50	2.77	4.50	1.80	7	10	42.	30	6	8	9	5
Total and average	2.35	3.07	1.90	97	105	26.1	18.2	3.7	76	126	55

SPECIAL INSPECTION—TABLE I.—Continued.

BOXES (WO◡DEN AND PAPER).

Running number.	Public Schools. Number attending.	Public Schools. Years. Average.	Public Schools. Years. Highest.	Public Schools. Years. Lowest.	Public Schools. Average or above.	Public Schools. Below average.	Parochial Schools. Number attending.	Parochial Schools. Years. Average.	Parochial Schools. Years. Highest.	Parochial Schools. Years. Lowest.	Parochial Schools. Average or above.	Parochial Schools. Below average.	Both Schools. Number attending.	Both Schools. Years. Av. in public	Both Schools. Years. Av. in parochial.
20	3	6.7	7	6	2	1	2	4	4	4	2	....	2	3.5	3
21	3	7	8	5	2	1	14	5.6	8	3	6	8	7	3	3.1
22	2	7.5	8	7	1	1	1	8	8	8	1	....	....	....	....
23	22	6.9	9	5	14	8	29	6.2	8	4	17	12	7	3.5	3.5
24	....	....	....	....	....	...	2	8	8	8	2	....	2	4.5	3
25	5	5.8	8	3	3	2	3	5	7	4	1	2	8	2.7	3.6
26	3	7.1	8	7	1	2	....	....	....	....	....	....	....	....	....
27	....	....	....	....	....	..	....	....	....	....	....	....	2	2.5	3.5
28	10	8.3	10	6	5	5	1	9	9	9	1	....	7	6.4	1.7
29	3	8.7	9	8	2	1	....	....	....	....	....	....	1	1	6
30	12	7.1	10	5	7	5	1	9	9	9	1	....	8	2.3	4.3
31	4	6.5	8	5	2	2	7	5.4	8	3	4	3	....	....	....
Total and average	67	5.9	8.5	5.7	39	28	60	6.6	7.6	5.7	35	25	44	3.2	3.5

BRICK.

Running number.	Public Schools. Number attending.	Public Schools. Years. Average.	Public Schools. Years. Highest.	Public Schools. Years. Lowest.	Public Schools. Average or above.	Public Schools. Below average.	Parochial Schools. Number attending.	Parochial Schools. Years. Average.	Parochial Schools. Years. Highest.	Parochial Schools. Years. Lowest.	Parochial Schools. Average or above.	Parochial Schools. Below average.	Both Schools. Number attending.	Both Schools. Years. Av. in public	Both Schools. Years. Av. in parochial.
32	2	7.5	8	7	1	1	1	6	6	6	1	....	....	....	....
33	2	7	9	5	1	1	1	5	5	5	1	....	....	....	....
34	5	5.6	7	4	3	2	4	6	6	6	4	....	....	....	....
35	....	....	....	....	....	...	2	4	5	3	1	1	....	....	....
Total and average	9	6.7	8	5.3	5	4	8	5.2	5.5	5.	7	1	....	....	....

BROOMS, BRUSHES AND BASKETS.

Running number.	Public Schools. Number attending.	Public Schools. Years. Average.	Public Schools. Years. Highest.	Public Schools. Years. Lowest.	Public Schools. Average or above.	Public Schools. Below average.	Parochial Schools. Number attending.	Parochial Schools. Years. Average.	Parochial Schools. Years. Highest.	Parochial Schools. Years. Lowest.	Parochial Schools. Average or above.	Parochial Schools. Below average.	Both Schools. Number attending.	Both Schools. Years. Av. in public	Both Schools. Years. Av. in parochial.
36	2	5.5	6	5	1	1	....	....	....	....	....	....	....	....	....
37	5	6.2	7	6	2	3	2	4.5	5	4	1	1	....	....	....
38	1	7	7	7	1	...	....	....	....	....	....	....	1	5	2
39	3	8	9	8	2	1	2	4.5	5	4	1	1	2	2	3.5
Total and average	11	6.6	7.2	6.5	6	5	4	4.5	5	4	2	2	3	3.5	2.7

CHAIRS.

Running number.	Public Schools. Number attending.	Public Schools. Years. Average.	Public Schools. Years. Highest.	Public Schools. Years. Lowest.	Public Schools. Average or above.	Public Schools. Below average.	Parochial Schools. Number attending.	Parochial Schools. Years. Average.	Parochial Schools. Years. Highest.	Parochial Schools. Years. Lowest.	Parochial Schools. Average or above.	Parochial Schools. Below average.	Both Schools. Number attending.	Both Schools. Years. Av. in public	Both Schools. Years. Av. in parochial.
40	3	7	9	5	2	1	5	7.4	9	5	1	4	....	....	....
41	29	7.1	9	2	13	16	8	6.6	8	5	4	4	....	....	....
42	10	6.4	9	2	5	5	8	6.7	9	3	5	3	3	4	4
43	2	5.5	7	4	1	1	7	7.1	8	6	2	5	6	3.9	3.6
44	3	6	8	2	2	1	8	5.6	8	3	4	4	9	3.2	3.9
45	3	6	7	5	2	1	16	7.1	8	3	4	12	5	4.3	2.4
46	1	8	8	8	1	...	1	6	6	6	1	....	....	....	....
47	7	7.3	8	7	3	4	20	6.2	8	4	12	8	5	2.6	5
48	2	7.5	8	7	1	1	12	6.4	8	4	8	4	6	3	5.3
49	....	....	....	....	....	...	1	6	6	6	1	....	1	5	1.5
50	3	8.3	9	8	2	1	5	7.4	8	6	2	3	9	2.9	4.1
Total and average	63	6.9	8.2	5	32	31	91	6.6	7.8	4.6	44	47	44	3.6	3.7

SPECIAL INSPECTION—TABLE I.—Continued.

BOXES (WOODEN AND PAPER).

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
20	7	.....	.....	7	.....	.....	7	.....	.....	3	4	$6.62
21	15	2	7	23	1	.....	20	4	13	16	.....	.....
22	3	.....	.....	3	.....	.....	.....	3	.....	.....	.....	.....
23	40	3	15	58	.....	.....	50	8	17	15	.....	.....
24	4	.....	.....	4	.....	.....	3	1	.....	.....	.....	.....
25	13	.....	3	16	.....	.....	13	3	.....	.....	.....	.....
26	2	.....	1	3	.....	.....	3	.....	.....	1	.....	.....
27	1	.....	1	2	.....	.....	2	.....	.....	.....	.....	.....
28	15	.....	3	16	2	.....	7	11	.....	.....	.....	.....
29	4	.....	.....	4	.....	.....	3	1	.....	.....	.....	.....
30	16	1	4	21	.....	.....	13	8	.....	.....	.....	.....
31	6	1	4	11	.....	.....	11	.....	9	9	2	2.87
Total and average.	126	7	38	168	3	.....	132	39	39	44	6	$4.74

BRICK.

Running number.	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.	No. who said father was working.	No. who said parents own home.	No. paying.	Average rent.
32	2	.....	1	2	1	.....	3	.....	.....	3	.....	.....
33	1	.....	2	3	.....	.....	3	.....	2	3	.....	.....
34	9	.....	.....	9	.....	.....	4	5	.....	7	.....	.....
35	1	.....	1	2	.....	.....	2	.....	.....	.....	2	$3.50
Total and average.	13	.....	4	16	1	.....	12	5	2	13	2	$3.50

BROOMS, BRUSHES AND BASKETS.

Running number.	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.	No. who said father was working.	No. who said parents own home.	No. paying.	Average rent.
36	2	.....	.....	2	.....	.....	2	.....	2	1	.....	.....
37	5	1	1	7	.....	.....	7	.....	.....	4	2	$7.75
38	1	.....	1	2	.....	.....	1	1	.....	.....	.....	.....
39	6	1	.....	7	.....	.....	2	5	.....	.....	.....	.....
Total and average.	14	2	2	18	.....	.....	12	6	2	5	2	$7.75

CHAIRS.

Running number.	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.	No. who said father was working.	No. who said parents own home.	No. paying.	Average rent.
40	7	.....	1	7	.....	1	4	4	6	6	1	$11.00
41	30	2	5	37	.....	.....	27	10	35	32	1	8.50
42	20	.....	2	22	.....	.....	16	6	.....	.....	.....	.....
43	12	.....	3	15	.....	.....	11	4	.....	.....	.....	.....
44	22	.....	.....	22	.....	.....	12	10	.....	.....	.....	.....
45	25	.....	.....	25	.....	.....	15	10	.....	.....	.....	.....
46	.....	.....	2	2	.....	.....	2	.....	.....	.....	.....	.....
47	32	.....	.....	31	1	.....	15	17	.....	.....	.....	.....
48	20	.....	.....	19	1	.....	14	6	.....	.....	.....	.....
49	2	.....	.....	2	.....	.....	1	1	.....	.....	.....	.....
50	17	.....	.....	17	.....	.....	8	9	.....	.....	.....	.....
Total and average..	187	2	13	199	2	1	125	77	41	38	2	$9.75

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
CIGARS AND TOBACCO.									
51	115	6	6	......	15	4	2	1	10
52	75	9	9	......	14.8	7	2	1	10
53	39	5	2	3	14.7	4	1	1	8
54	130	9	.....	9	15.6	7	2	......	8
55	12	2	2	......	14.7	1	1	......	9.5
56	14	6	5	1	14.9	5	1	......	10
57	7	2	2	......	14.5	2	......	......	10
58	35	5	5	......	14.6	2	3	......	9
59	14	4	4	......	14.7	1	3	......	10
Total and average	441	48	35	13	14.8	33	15	3	9.4
CLOTHING.									
60	75	7	1	6	15.1	3	4	......	10
61	60	22	5	17	15.1	12	10	......	10
62	168	6	.....	6	15.5	5	1	......	10
63	128	2	.....	2	15.8	1	1	......	10
64	143	5	4	1	15.2	3	2	......	10
65	32	5	.....	5	15.1	4	1	......	8
Total and average	606	47	10	37	15.3	28	19	......	9.7
CONFECTIONERY AND CRACKERS.									
66	80	35	8	27	15.3	17	18	......	10
67	50	15	....	15	15.1	6	9	1	10
68	150	29	6	23	15.2	19	10	1	10
69	43	11	2	9	14.10	8	3	......	10
70	200	35	10	25	15.3	18	17	......	10
71	30	4	.....	4	14.7	3	1	......	10
72	110	5	3	2	14.8	3	2	2	10
73	28	3	.....	3	15.3	2	1	......	10
74	53	15	9	6	15.	10	5	1	10
Total and average	744	152	38	114	15.	86	66	5	10
COTTON AND LINEN MILLS.									
75	192	14	6	8	15.1	7	7	......	11
76	300	19	13	6	14.6	12	7	3	11
77	22	2	2	......	14.7	1	1	1	11
Total and average	512	35	21	14	14.8	20	15	4	11.

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	Wks.	Mos.	Days	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			

CIGARS AND TOBACCO.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average.	Highest.	Lowest.	Average or above.	Under average.	No. having had previous employers.
51	3.04	4.00	2.50	2	4	36.1	18	60	3	3	2
52	3.11	5.00	2.00	1	8	22.7	16	1	3	6	4
53	3.09	4.75	2.50	2	3	15.4	12	1	2	3	3
54	3.00	3.00	3.00	9	.....	43.	15	14	4	5	2
55	3.00	3.00	3.00	2	.....	1.	¼	6	2	......	......
56	1.87	3.00	1.25	2	4	46.1	24	156	2	4	......
57	1.50	1.50	1.50	2	.....	13.	5	1	1	1	......
58	2.05	2.25	2.00	1	4	15.6	7	6	3	2	2
59	2.12	2.25	2.00	2	2	19.5	9	1	2	2	1
Total and average	2.53	3.19	2.19	23	25	23.6	11.8	27.3	22	26	14

CLOTHING.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average.	Highest.	Lowest.	Average or above.	Under average.	No. having had previous employers.
60	2.03	3.00	1.50	2	5	10.7	6	21	2	5	2
61	2.33	3.00	1.50	9	13	22.4	36	6	8	14	......
62	1.62	2.25	1.50	1	5	9.5	8	6	1	5	1
63	3.50	3.50	3.50	2	.....	21.5	5	130	2	......	1
64	3.20	4.00	2.50	2	3	35.6	16	4	2	3	......
65	1.78	2.00	1.60	2	3	23.4	6	4	4	1	......
Total and average	2.41	2.96	2.01	18	29	20.5	12.8	28.5	19	28	4

CONFECTIONERY AND CRACKERS.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average.	Highest.	Lowest.	Average or above.	Under average.	No. having had previous employers.
66	2.39	3.75	1.50	13	22	53.4	30	1	12	23	1
67	1.95	2.90	1.50	10	5	28.1	24	6	8	7	3
68	2.28	2.75	2.00	7	22	34.8	36	1	12	17	6
69	1.86	3.00	1.50	4	7	22.	18	2	5	6	......
70	2.01	3.00	1.50	12	23	46.8	24	12	15	20	5
71	1.93	2.50	1.75	1	3	12.7	9	6	1	3	......
72	1.50	1.50	1.50	5	.....	4.8	2	3	1	4	2
73	2.06	2.25	2.00	1	2	7.3	4	1	1	2	2
74	1.73	2.50	1.50	6	9	21.2	12	12	7	8	6
Total and average	1.96	2.68	1.64	59	93	25.6	17.6	4.8	62	90	25

COTTON AND LINEN MILLS.

Running number.	Average wages.	Highest wages.	Lowest.	Average or above.	Less than average.	Average.	Highest.	Lowest.	Average or above.	Under average.	No. having had previous employers.
75	2.98	3.50	2.10	11	3	39.4	24	14	7	7	......
76	3.00	4.15	2.00	8	11	30.7	24	6	6	13	1
77	3.25	4.00	2.50	1	1	3.	5	6	1	1	1
Total and average	3.07	3.88	3.30	20	15	24.4	16.3	8.6	14	21	2

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Av. in public	Years. Av. in parochial.
CIGARS AND TOBACCO.															
51	1	6	6	6	1	..	5	5.8	7	4	4	1	....	....	....
52	2	6	7	5	1	1	4	6.1	8	5	1	3	3	2.7	3
53	....	....	....	....	....	...	5	4.4	5	3	2	3	....	....	...
54	5	6.8	7	6	4	1	4	6	7	5	2	2	....	....	...
55	....	....	....	....	....	..	2	6	6	6	2	....	....	....	...
56	1	8	8	8	1	...	2	6.5	7	6	1	1	3	2.6	2.6
57	....	....	....	....	....	...	1	8	8	8	1	....	1	4	4
58	2	7.5	8	7	1	1	1	8	8	8	1	....	2	2.5	3.5
59	....	....	....	....	....	...	2	4.5	5	4	1	1	2	3	3
Total and average..	11	6.8	7.2	6.4	8	3	26	6.1	6.8	5.4	15	11	11	2.9	3.2
CLOTHING.															
60	4	7.2	9	6	2	2	3	6.3	7	5	2	1	....	....	...
61	15	6.9	9	4	10	5	7	6.4	9	3	3	4	....	....	...
62	1	7	7	7	1	...	2	7	8	6	1	1	3	2.5	4.7
63	....	....	....	....	....	...	1	8	8	8	1	....	1	5	2
64	4	7.5	8	7	3	1	....	....	....	....	....	....	1	4	4
65	1	8	8	8	1	...	3	6.6	7	6	2	1	1	4	3
Total and average..	25	7.3	8.2	6.4	17	8	16	6.8	7.8	5.6	9	7	6	3.8	3.4
CONFECTIONERY AND CRACKERS.															
66	18	6.6	9	4	9	9	17	6.7	8	5	9	8	....	....	....
67	4	7.7	8	7	3	1	11	6	8	1	8	3	....	....	....
68	13	6.9	10	5	7	6	16	5.5	9	3	10	6	....	....	....
69	3	6	7	5	2	1	8	5.7	9	2	5	3	....	....	....
70	9	7.7	9	5	7	2	26	5.5	9	3	14	12	....	....	....
71	2	7.5	8	7	1	1	....	....	....	....	....	....	2	4.5	2
72	....	....	....	....	....	...	3	6.6	7	6	3	....	2	3.5	4.5
73	1	7	7	7	1	..	....	....	....	....	....	....	2	1.	6.5
74	10	6.6	8	4	5	5	2	6.	6	6	2	....	3	5.6	2.1
Total and average..	60	7.	8.2	5.5	35	25	83	6.	8	3.7	51	32	9	3.6	3.7
COTTON AND LINEN MILLS.															
75	2	5	7	3	1	1	8	5.3	7	3	5	3	4	3.	3.5
76	1	4	4	4	1	...	18	6.1	8	6	8	5	5	2.	4.7
77	....	....	....	....	....	...	2	6.	6	6	2	....	....	....	....
Total and average..	3	4.5	5.5	3.5	2	1	23	5.8	7	5	15	8	9	2.5	4.1

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
CIGARS AND TOBACCO.												
51	6	.....	.....	6	.....	.....	6	.....	.....	.....	.....	.....
52	9	.....	.....	9	.....	.....	9	.....	.....	5	1	$5.00
53	5	.....	.....	5	.....	.....	5	.....	.....	5	.....	.....
54	9	.....	.....	9	.....	.....	9	.....	.....	.....	.....	.....
55	2	.....	.....	2	.....	.....	2	.....	.....	1	.....	.....
56	6	.....	.....	6	.....	.....	6	.....	.....	.....	.....	.....
57	2	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....
58	4	.....	1	5	.....	.....	3	2	.....	.....	.....	.....
59	4	.....	.....	4	.....	.....	3	1	.....	.....	.....	.....
Total and average..	47	.....	1	48	.....	.....	43	5	.....	11	1	$5.00
CLOTHING.												
60	6	1	.....	7	.....	.....	5	2	5	4	1	$5.00
61	15	1	6	21	1	.....	12	10	12	12	7	6.70
62	6	.....	.....	6	.....	.....	2	4	.....	.....	.....	.....
63	1	1	.....	2	.....	.....	1	1	.....	.....	.....	.....
64	3	1	1	5	.....	.....	1	4	.....	.....	.....	.....
65	5	.....	.....	5	.....	.....	1	4	.....	.....	.....	.....
Total and average..	36	4	7	46	1	.....	22	25	17	16	8	$5.85
CONFECTIONERY AND CRACKERS.												
66	27	2	6	35	.....	.....	25	10	27	23	9	$4.61
67	14	.....	1	15	.....	.....	8	7	8	5	5	6.48
68	26	3	.....	29	.....	.....	26	3	19	21	7	6.07
69	7	.....	4	10	1	.....	7	4	2	6	.....	.....
70	27	2	6	34	1	.....	26	9	23	9	13	5.94
71	2	2	.....	4	.....	.....	.....	4	.....	.....	.....	.....
72	3	1	1	5	.....	.....	2	3	.....	.....	.....	.....
73	3	.....	.....	3	.....	.....	1	2	.....	.....	.....	.....
74	10	3	2	15	.....	.....	9	6	.....	2	.....	.....
Total and average..	119	13	20	150	2	.....	104	48	79	66	34	$5.77
COTTON AND LINEN MILLS.												
75	13	.....	1	14	.....	.....	9	5	.....	1	.....	.....
76	12	.....	7	19	.....	.....	15	4	.....	1	.....	.....
77	1	.....	1	2	.....	.....	2	.....	.....	.....	.....	.....
Total and average..	26	.....	9	35	.....	.....	26	9	.....	2	.....	.....

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
FURNITURE.									
78	91	3	3	......	15.3	2	1	......	10
79	185	15	15	......	15.1	8	7	......	10
80	65	2	2	......	15.1	1	1	......	10
81	54	3	3	......	14.8	2	1	......	10
82	36	5	5	......	14.6	2	3	......	10
83	600	15	15	......	14.8	11	4	......	10
84	86	13	13	......	14.7	8	5	1	10
85	117	19	19	......	15.2	9	10	......	10
86	107	16	16	......	14.7	8	8	2	8
87	33	6	6	......	14.8	4	2	......	10
88	240	16	16	......	15.2	13	3	......	10
89	41	3	3	......	15	2	1	......	8
Total and average	1,655	116	116	......	14.9	70	46	3	9.9
IRON GOODS (MALLEABLE).									
90	50	10	10	......	15	5	5	......	10
91	30	6	6	......	15.1	4	2	......	10
92	42	8	6	2	15.2	4	4	......	10
93	11	5	5	......	14.2	2	3	1	10
94	475	49	49	......	15.3	25	24	2	9.8
95	59	8	8	......	15.3	6	2	......	10
96	650	38	38	......	15.2	18	20	3	10
97	57	4	4	......	14.8	2	2	......	10
98	126	12	12	......	15	7	5	......	10
99	290	14	14	......	14.8	7	7	1	10
100	237	19	19	......	14.7	11	8	......	10
101	275	7	7	......	14.9	4	3	1	10
Total and average	2,302	180	178	2	14.9	95	85	8	9.9
KNIT GOODS.									
102	400	123	11	112	15	44	79	......	10
103	375	136	25	111	15	51	85	1	10
104	150	37	.....	37	15	15	22	2	10
105	400	77	3	74	14.8	41	36	2	10
106	260	62	32	30	14.7	36	26	3	10
107	134	27	1	26	14.6	19	8	......	10
108	28	3	.....	3	15	3	......	......	10
109	87	6	1	5	15.2	4	2	......	10
110	104	23	2	21	15	14	9	......	10
111	125	8	1	7	13.8	5	3	4	10
Total and average	2,063	502	76	426	14.8	232	270	12	10

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	Wks.	Mos.	Days	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			
FURNITURE.											
78	$2.60	$3.00	$2.40	1	2	6.6	2	18	2	1	.....
79	2.59	3.00	2.10	3	12	13.3	12	3	7	8	8
80	3.00	3.00	3.00	2	.....	1.6	¾	3	1	1	2
81	3.30	3.00	3.00	3	.....	39	12	156	1	2	.....
82	3.27	3.75	2.40	3	2	20	12	1	2	8	8
83	2.42	3.00	1.80	3	12	19.9	12	26	6	9	5
84	2.43	3.00	2.10	6	7	31	24	4	4	9	.....
85	2.76	3.60	2.40	4	15	24.7	36	2	9	10	9
86	2.62	5.40	1.92	4	12	9.5	12	1	3	13	1
87	3.08	3.50	3.00	1	5	17.5	12	6	4	2	.....
88	2.81	3.60	2.40	4	12	52.1	24	12	6	10	5
89	2.46	3.00	1.92	1	2	26	12	78	1	2	.....
Total and average..	$2.77	$3.40	$2.37	35	81	21.7	14.2	25.8	46	70	33
IRON GOODS (MALLEABLE).											
90	$2.70	$3.50	$2.50	3	7	27.7	30	14	4	6	1
91	2.12	2.50	2.00	2	4	15.8	12	21	3	3	3
92	3.09	4.00	2.50	2	6	26.2	12	14	3	5	5
93	2.90	3.50	2.50	2	3	23.4	8	60	2	8	8
94	3.66	6.45	1.75	17	32	27.6	24	1	15	34	23
95	2.78	3.00	2.50	4	4	7.1	4	2	3	5	3
96	3.25	5.50	2.50	11	27	23.6	24	2	12	26	18
97	2.37	2.50	2.00	3	1	19	12	2	1	3	2
98	2.09	2.40	1.75	7	5	9.2	12	1	2	10	2
99	3.98	5.40	3.00	9	5	13.1	12	6	4	10	13
100	3.65	5.00	3.00	8	11	21.5	18	6	8	11	11
101	3.07	3.50	3.00	1	6	23.1	12	5	3	4	2
Total and average..	$2.94	$3.94	$2.41	69	111	19.8	15	11.1	60	120	86
KNIT GOODS.											
102	$1.86	$2.75	$1.50	51	72	25.5	36	2	46	77	32
103	2.16	5.50	1.50	63	13	23.7	36	1	31	105	46
104	2.44	3.25	1.50	19	18	35.9	24	1	13	24	8
105	1.66	3.00	1.10	26	51	13.6	12	1	25	52	18
106	4.17	7.00	2.10	31	31	29.5	24	1	27	35	2
107	1.60	3.50	1.25	9	18	42.1	36	1	11	16	.....
108	2.20	3.00	1.50	1	2	23	6	104	2	1	.....
109	2.10	3.60	1.50	2	4	18.5	8	12	2	4	.....
110	3.07	8.50	2.40	5	18	39.9	24	1	8	15	4
111	2.62	3.00	2.50	1	7	27.5	24	3	2	6	.....
Total and average..	2.38	4.31	1.68	208	294	27.2	23	12.7	167	335	105

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Public Schools						Parochial Schools.						Both Schools.		
		Years.						Years.						Years.	
	Number attending.	Average.	Highest.	Lowest.	Average or above.	Below average.	Number attending.	Average.	Highest.	Lowest.	Average or above.	Below average.	Number attending.	Av. in public	Av. in parochial.
FURNITURE.															
78	1	8	8	8	1	...	2	6	7	5	1	1	....	....	....
79	8	7.5	8	6	6	2	6	6.1	10	3	3	3	1	6	3
80	....	....	....	....	....	..	2	6.5	7	6	1	1	....	....	....
81	....	....	....	....	....	..	2	6.5	7	6	1	1	1	1	6
82	1	8	8	8	1	..	3	6.6	8	5	2	1	1	0.5	6
83	7	6.9	8	5	5	2	7	6.7	9	5	4	3	1	1	4
84	8	5.6	8	5	4	4	1	3	3	3	1	....	4	3.7	2.7
85	7	6.9	8	6	3	4	11	6.3	8	5	5	6	1	5	3
86	10	7.1	8	6	5	5	2	4.5	5	4	1	1	4	3.5	3.2
87	1	8.5	8.5	8.5	1	...	2	7.5	8	7	1	1	3	1	4
88	5	4.8	7	3	3	2	6	5.4	7	4	3	3	5	3.8	4.6
89	1	5	5	5	1	...	1	7	7	7	1	....	1	7	2
Total and average	49	6.8	7.6	6	30	19	45	6	7.1	5	24	21	22	3.2	3.8
IRON GOODS (MALLEABLE).															
90	1	7	7	7	1	...	9	5.7	9	2	5	4	....	....	....
91	3	6.3	7	6	1	2	1	4	4	4	1	....	2	4.5	3
92	2	6.5	7	6	1	1	5	6.8	7	6	4	1	1	3	3
93	....	....	....	....	....	..	5	5.4	6	4	3	2	....	....	....
94	11	5.9	10	3	8	3	32	5.4	8	2	14	18	6	2.3	3.3
95	2	6.5	7	6	1	1	6	5	6	4	3	3	....	....	....
96	2	6	7	5	1	1	36	5.8	8	2	18	18	....	....	....
97	1	6	6	6	1	...	2	6	6	6	2	....	1	3	3
98	5	8	10	6	4	1	4	5.7	8	3	2	2	3	3.6	2.6
99	13	7.3	9	4	4	9	....	....	....	....	....	....	1	4	2
100	5	7.2	8	6	2	3	9	6.9	8	6	7	2	5	1.2	4.8
101	4	6.7	7	6	3	1	3	5.6	6	5	2	1	....	....	....
Total and average	49	6.6	7.7	5.5	27	22	112	5.6	6.9	4	61	51	19	4.5	3.1
KNIT GOODS.															
102	15	6.4	8	3	9	6	103	5.3	8	1	46	57	5	3	3.2
103	28	5.5	8	2	15	13	108	5.7	10	3	63	45	....	....	....
104	5	6.8	8	5	4	1	32	5.9	8	3	20	12	....	....	....
105	15	5.8	10	1	6	9	61	5.8	8	3	36	25	1	4	4
106	17	7.5	10	5	9	8	31	6.3	9	3	18	13	14	2.7	4.2
107	6	7.2	8	6	2	4	9	6.3	8	5	4	5	12	1.7	3.7
108	1	8	8	8	1	..	1	8	8	8	1	....	1	4	2
109	3	6.6	9	3	2	1	....	....	....	....	....	....	3	1.7	6.3
110	11	7.6	9	5	6	5	4	7	8	6	3	1	8	2.7	3.7
111	5	7	8	6	3	2	3	7.3	8	7	1	2	....	....	....
Total and average	106	6.8	8.6	4.4	57	49	352	6.4	8.3	4.3	192	160	44	2.8	3.8

SPECIAL INSPECTION—TABLE I.—Continued.

FURNITURE.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
78	2	1		3			3					
79	15			14	1		7	8				
80	2			2			1	1				
81	3			3			2	1				
82	3		2	5			5					
83	15			15			7	8				
84	11	1	1	13			12	1				
85	17	1	1	18	1		10	9				
86	16			15		1	10	6				
87	3	2	1	6			3	3				
88	16			16			11	5				
89	2		1	3			1	2				
Total and average	105	5	6	113	2	1	72	44				

IRON GOODS (MALLEABLE).

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
90	6	1	3	10			9	1	6	6		
91	6			6			4	2		4	2	$3.75
92	8			8			7	1				
93	5			5			8	2		4	1	3.00
94	36		13	48	1		40	9	15	30	5	3.75
95	6		2	7	1		8			6	1	4.50
96	28	1	9	37	1		28	10	7	24	6	4.00
97	4			4			4			2	2	5.00
98	10	1	1	12			7	5				
99	10	1	3	14			13	1				
100	12	2	5	19			5	14				
101	5		2	7			2	5				
Total and average	136	6	38	177	3		130	50	28	76	17	$4.00

KNIT GOODS.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
102	86	5	32	122	1		109	14				
103	92	5	39	134	2		120	16	2	8	4	$5.87
104	28	2	7	37			37			5		
105	59	3	15	77			69	8				
106	29	10	23	60	2		24	38				
107	18	2	7	27			18	9				
108	1		2	3			2	1		1		
109	5		1	4	2		4	2				
110	23			23			9	14				
111	7		1	8			6	2	7	8		
Total and average	348	27	127	495	7		398	104	9	22	4	$5.87

SPECIAL INSPECTION—TABLE I.—Continued.

LAGER BEER (BOTTLING).

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
112	373	18	18	5	15.5	11	7	......	9.6
113	131	7	4	3	15	4	3	......	10
114	55	6	6	......	15.3	3	3	......	10
115	1,187	83	29	54	14.8	60	23	......	10
116	636	13	4	9	15.4	8	5	......	10
117	66	5	5	......	15	2	3	......	10
118	61	3	3	......	15.7	2	1	......	10
Total and average	2,509	135	64	71	15.2	90	45	......	9.9

LITHOGRAPHING.

Running number.	Total wage earners.	Total 16 years or under.	Male.	Female.	Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
119	125	9	9	......	15.5	6	3	......	9.9
120	40	5	5	......	16	3	2	......	10
121	84	15	15	......	15	8	7	......	10
122	14	2	2	......	13.5	1	1	1	10
123	40	8	8	......	15.6	5	3	......	9
Total and average	303	39	39	......	15.1	23	16	1	9.8

LUMBER, LATH AND SHINGLES.

Running number.	Total wage earners.	Total 16 years or under.	Male.	Female.	Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
124	42	2	2	......	15	1	1	1	10
125	34	5	5	......	15.8	4	1	......	10
126	207	2	2	......	13.5	1	1	1	10
127	101	3	3	......	14	2	1	1	10
128	350	88	88	......	14.2	30	58	13	10
Total and average	734	100	100	......	15.5	38	62	16	10

MIXED TEXTILES.

Running number.	Total wage earners.	Total 16 years or under.	Male.	Female.	Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
129	258	113	46	67	14.7	61	52	8	10
130	55	23	2	21	15.8	12	11	......	10
131	28	16	16	......	14.9	8	8	......	10
132	36	2	.....	2	15.1	1	1	......	10
Total and average	377	154	64	90	15.1	82	72	8	10

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			
LAGER BEER (BOTTLING).											
112	$3.00	$3.30	$2.70	15	3	51.1	24	14	6	12	4
113	2.85	3.25	2.50	4	3	20.5	12	14	3	4	4
114	3.56	6.00	2.70	2	4	12.1	11	21	4	2	4
115	2.48	3.60	2.25	8	75	28.5	24	14	36	47	24
116	2.46	3.00	2.00	10	3	16.9	12	1	4	9	5
117	3.50	3.50	3.50	5	.....	16.2	12	6	2	3	4
118	3.17	3.50	3.00	1	2	1.8	¾	2	2	1	3
Total and average..	$3.00	$3.73	$2.66	45	90	21.1	13.6	10.3	57	78	48
LITHOGRAPHING.											
119	$2.77	$3.50	$2.50	3	6	34.5	24	21	4	5	5
120	3.12	4.00	2.10	2	3	61.8	30	36	2	3	......
121	2.40	3.50	1.50	7	8	26.2	24	1	5	10	5
122	1.87	2.00	1.75	1	1	5	1½	4	1	1	......
123	2.68	3.50	2.00	4	4	64.5	24	6	4	4	2
Total and average..	$2.57	$3.30	$1.97	17	22	38.4	26.2	13.6	16	23	12
LUMBER, LATH AND SHINGLES.											
124	$3.00	$3.00	$3.00	2	.....	27.5	12	18	1	1	......
125	3.30	4.50	3.00	1	4	17	8	2	2	3	3
126	4.50	6.00	3.00	1	1	26	12	2	1	1	......
127	2.80	3.00	2.40	2	1	2.6	½	10	2	1	......
128	2.99	3.60	2.70	54	34	22.2	30	1	27	61	1
Total and average..	$3.31	$4.02	$2.82	60	40	19.6	12.8	6.6	33	67	4
MIXED TEXTILES.											
129	$1.98	$4.00	$0.59	58	55	26.9	36	1	27	86	24
130	3.05	5.00	2.50	7	16	50.9	24	14	8	15	2
131	2.15	2.75	1.75	6	10	31.1	24	6	4	12	4
132	2.40	2.40	2.40	2	.....	2.5	¾	12	1	1	1
Total and average..	$2.39	$3.54	$1.81	73	81	27.8	21.1	8.2	40	114	31

SPECIAL INSPECTION—TABLE I.—Continued.

LAGER BEER (BOTTLING).

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Av. in public	Years. Av. in parochial.
112	8	6.1	8	3	3	5	10	6.2	9	4	4	6	....	....	....
113	1	8	8	8	1	...	5	6.4	8	6	1	4	1	3	3
114	....	....	....	....	....	...	6	5	6	3	4	2	....	....	....
115	26	6	8	1	22	4	57	5.5	9	2	30	27	....	....	....
116	4	6.2	7	5	2	2	9	5.3	8	3	5	4	....	....	....
117	2	7	8	6	1	1	2	5.5	6	5	1	1	1	2	5
118	1	7	7	7	1	...	....	....	....	....	....	....	2	3	5
Total and average	42	6.6	7.6	5	30	12	89	5.6	7.6	3.8	45	44	4	2.7	4.3

LITHOGRAPHING.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Av. in public	Years. Av. in parochial.
119	6	6.6	8	6	3	3	3	7.3	8	7	1	2	....	....	....
120	2	7.5	8	7	1	1	3	7.3	8	7	1	2	....	....	....
121	11	7.1	9	5	4	7	4	7.2	8	6	2	2	....	....	....
122	....	....	....	....	....	...	2	6	8	4	1	1	....	....	....
123	3	7	7	7	3	..	5	6.8	8	6	3	2	....	....	....
Total and average	22	7.5	8	6.2	11	11	17	6.9	8	6	8	9	....	....	....

LUMBER, LATH AND SHINGLES.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Av. in public	Years. Av. in parochial.
124	1	6	6	6	1	...	1	8	8	8	1	....	....	....	....
125	3	7	9	5	2	1	2	7	7	7	2	....	....	....	....
126	2	6	8	4	1	1	....	....	....	....	....	....	....	....	....
127	3	7.6	8	7	2	1	....	....	....	....	....	....	....	....	....
128	47	7	9	3	33	14	10	5.8	9	5	6	4	29	3.8	3.1
Total and average	56	6.7	8	5	39	17	13	6.9	8	6.6	9	4	29	3.8	3.1

MIXED TEXTILES.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Average.	Years. Highest.	Years. Lowest.	Average or above.	Below average.	Number attending.	Years. Av. in public	Years. Av. in parochial.
129	12	6.4	9	1	7	5	101	5.1	9	1	49	52	....	....	....
130	8	8.5	11	6	3	5	15	6.4	9	1	7	8	....	....	....
131	6	6.1	7	5	2	4	8	6.6	8	6	5	3	2	3	3.5
132	1	9	9	9	1	...	1	8	8	8	1	....	....	....	....
Total and average	27	7.5	9	5.2	13	14	125	6.5	8.5	4	62	63	2	3	3.5

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent
LAGER BEER (BOTTLING).												
112	13	1	4	18	.....	.....	16	2	.....	12	5	$6.40
113	6	.....	1	7	.....	.....	6	1	.....	5	2	4.25
114	5	.....	1	6	.....	.....	6	.....	.....	4	1	3.50
115	55	4	24	83	.....	.....	76	7	26	59	16	5.93
116	9	.....	4	13	.....	.....	13	.....	8	10	.....	.....
117	4	.....	1	5	.....	.....	2	3	.....	1	.....	.....
118	3	.....	.....	3	.....	.....	1	2	.....	.....	.....	.....
Total and average.	95	5	35	135	.....	.....	120	15	34	91	24	$5.02
LITHOGRAPHING.												
119	7	2	.....	9	.....	.....	7	2	.....	6	.....	.....
120	3	2	.....	5	.....	.....	5	.....	.....	2	1	$7.00
121	11	1	3	15	.....	.....	9	6	7	8	6	5.33
122	2	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....
123	7	1	.....	8	.....	.....	5	3	6	4	2	7.50
Total and average.	30	6	3	39	.....	.....	28	11	13	20	9	$6.61
LUMBER, LATH AND SHINGLES.												
24	2	.....	.....	1	1	.....	1	1	1	1	.....	.....
125	5	.....	.....	5	.....	.....	4	1	1	1	1	$7.00
126	2	.....	.....	2	.....	.....	1	1	.....	.....	.....	.....
127	2	1	.....	3	.....	.....	2	1	.....	.....	.....	.....
128	65	9	14	88	.....	.....	61	27	.....	.....	.....	.....
Total and average..	76	10	14	99	1	.....	69	31	2	2	1	7.00
MIXED TEXTILES.												
129	75	3	35	111	2	.....	96	17	14	27	1	$3.50
130	19	2	2	23	.....	.....	18	5	20	16	.....	.....
131	14	.....	2	15	1	.....	15	1	.....	.....	.....	.....
132	2	.....	.....	2	.....	.....	1	1	.....	.....	.....	.....
Total and average..	110	5	39	151	3	.....	130	24	34	43	1	$3.50

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
OFFICE AND SALOON FURNITURE.									
133	60	2	2	......	14.6	1	1	1	10
134	50	5	5	......	15	3	2	1	10
135	71	2	2	......	14.8	1	1	......	10
136	98	3	3	......	15.2	2	1	......	10
137	236	13	13	......	15	7	6	1	10
Total and average	515	25	25	......	14.9	14	11	3	10
SASH, DOORS AND BLINDS.									
138	250	20	20	......	15.3	9	11	1	10
139	42	8	8	......	14.6	6	2	1	10
140	400	62	62	......	14.9	37	25	7	10
141	105	11	11	......	15.3	6	5	......	10
142	287	20	20	......	15.2	12	8	......	10
143	100	6	6	......	15.3	2	4	......	9
144	174	8	8	......	15.4	5	3	......	8
145	53	5	5	......	14.8	3	2	......	10
146	210	13	10	3	14.9	7	6	......	8
147	190	13	13	......	15.4	8	5	......	10
148	721	44	37	7	14.8	21	23	1	10
149	92	2	2	......	15	1	1	......	10
150	163	17	17	......	15.2	9	8	......	8
Total and average	2,787	229	219	10	15.1	126	103	10	9.4
SHEET METAL GOODS.									
151	16	5	5	......	15.3	4	1	......	10
152	455	71	48	23	15.2	37	34	......	10
153	900	207	155	52	15.2	114	93	......	10
154	80	10	10	......	14.1	7	3	3	10
155	200	31	31	......	15.2	17	14	......	10
156	31	3	3	......	15.2	1	2	......	10
157	50	16	16	......	14.9	7	9	1	10
Total and average	1,732	348	268	75	15	187	156	4	10

SPECIAL INSPECTION—TABLE I.—Continued.

OFFICE AND SALOON FURNITURE.

Running number.	WAGES.					TIME IN PRESENT EMPLOY.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest			
133	$3.12	$3.25	$3.00	1	1	18.5	6	52	1	1	2
134	2.40	3.50	2.00	2	3	21.4	8	21	3	2	5
135	2.50	3.00	2.00	1	1	27.5	11	65	1	1	......
136	2.61	3.00	2.33	1	2	53.3	24	2	1	2	1
137	3.11	4.20	2.40	4	9	25.2	36	6	4	9	9
Total and average..	$2.75	$3.39	$2.34	9	16	2.91	17	29.2	10	15	17

SASH. DOORS AND BLINDS.

Running number.	WAGES.					TIME IN PRESENT EMPLOY.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest			
138	$2.34	$3.60	$2.00	5	15	24.3	23	6	7	13	5
139	2.62	3.60	2.40	2	6	19.9	24	21	1	7	4
140	2.40	4.50	1.32	25	37	22	36	1	21	41	27
141	2.32	3.00	2.10	5	6	12	18	6	2	9	6
142	2.91	3.60	2.40	16	4	31.5	12	14	12	8	5
143	2.26	3.00	1.92	3	3	28.8	12	60	2	4	1
144	2.56	3.30	1.92	4	4	33	24	21	3	5	5
145	2.40	2.40	2.40	5	.....	2.2	1	1	3	2	2
146	1.97	3.00	1.44	4	9	28.8	24	6	5	8	4
147	2.35	2.70	2.10	10	3	33.7	24	30	4	9	9
148	2.38	3.00	2.10	22	22	30.7	36	6	17	27	12
149	2.10	2.10	2.10	2	.....	5.5	1½	30	1	1	1
150	2.45	3.00	2.10	3	14	22.9	24	2	5	12	8
Total and average..	$2.39	$3.14	$2.02	106	123	22.7	20	15.7	83	146	89

SHEET METAL GOODS.

Running number.	WAGES.					TIME IN PRESENT EMPLOY.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest			
151	$2.74	$3.00	$2.45	3	2	16.2	12	9	1	4	2
152	2.79	3.50	2.00	22	49	27.3	12	1	25	46	29
153	2.62	4.00	2.00	97	110	30.6	30	1	85	122	67
154	2.05	2.25	2.00	2	8	9.3	7	1	3	7	7
155	2.35	3.00	2.00	13	18	16.1	18	6	11	20	14
156	2.50	3.50	2.00	1	2	55	36	1	1	2	......
157	1.86	2.25	1.75	5	11	4.1	2	6	8	8	3
Total and average..	$2.41	$3.07	$2.03	143	200	2.26	16.7	3.5	134	209	122

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
		Years.						Years.						Years.	
	Number attending.	Average.	Highest.	Lowest.	Average or above.	Below average.	Number attending.	Average.	Highest.	Lowest.	Average or above.	Below average.	Number attending.	Av. in public.	Av. in parochial.
OFFICE AND SALOON FURNITURE.															
133	....	....	....	....	....	..	2	5.5	6	5	1	1	....	....	....
134	1	9	9	9	1	...	4	6.7	8	6	2	2	....	....	....
135	1	3	3	3	1	...	1	8	8	8	1	....	....	....	....
136	1	6	6	6	1	...	2	6.5	7	6	1	1	....	....	....
137	8	6.5	9½	4	4	4	2	7	8	6	1	1	2	2.5	4
Total and average	11	6.1	6.8	5.5	7	4	11	6.7	7.4	6.2	6	5	2	2.5	4
SASH, DOORS AND BLINDS.															
138	3	6.3	7	6	1	2	17	4.7	8	2	9	8	....	....	....
139	1	7	7	7	1	...	6	5.8	6	5	5	1	1	3	3
140	15	6	8	4	9	6	45	5.3	9	2	26	19	2	2	2.5
141	6	7.3	12	5	1	5	5	6	8	4	3	2	....	....	....
142	4	6.5	8	5	2	2	2	6.5	7	6	1	1	14	3.8	3
143	....	....	....	....	....	...	4	6.2	7	6	1	3	1	3	3
144	3	7	7	6	2	1	2	7.5	7	6	1	1	3	3	3.6
145	3	8	8	8	3	..	1	7	7	7	1	....	1	7	4
146	3	7	7	7	3	...	8	6.2	8	5	3	5	2	3.6	4
147	2	6.5	8	5	1	1	10	7.1	9	6	2	8	1	2	6
148	10	6.6	10	2	6	4	32	6.2	9	3	14	18	2	2	4.5
149	1	9	9	9	1	...	....	....	....	....	....	....	1	6	1
150	4	5.5	8	3	2	2	11	6.1	7	3	6	5	1	5	2
Total and average	55	6.8	8.2	5.6	32	23	143	6.2	7.6	4.6	72	71	29	3.6	3.3
SHEET METAL GOODS.															
151	1	9	9	9	1	...	4	4.5	7	3	1	3	....	....	....
152	13	6.1	8	2	7	6	53	6.1	9	2	29	24	5	3.6	3.6
153	38	7	9	3	24	14	160	5.5	9	1	94	66	9	3.3	3.9
154	1	6	6	6	1	...	9	6.4	8	4	6	3	....	....	....
155	4	2.5	6	1	1	3	24	5.1	8	3	12	12	3	4	4.2
156	1	3	3	3	1	...	1	6	6	6	1	....	1	3	3
157	7	6.7	9	3	5	2	9	5.4	8	2	5	4	....	....	....
Total and average	65	5.7	7.1	3.7	40	25	260	5.5	7.8	3.	148	112	18	3.5	3.7

SPECIAL INSPECTION—TABLE I.—Continued.

OFFICE AND SALOON FURNITURE.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent
133	2	......	......	2	......	.....	2	......	......	1	......	......
134	4	......	1	5	......	.....	5	......	4	1	......	......
135	......	......	2	2	......	.....	2	......	......	......	2	475
136	2	......	1	3	......	.....	2	1	......	1	1	800
137	8	2	3	13	......	.....	5	8	......	......	......	......
Total and average..	16	2	7	25	......	.....	16	9	4	3	8	6.37

SASH, DOORS AND BLINDS.

Running number.	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.	No. who said father was working.	No. who said parents own home.	No. paying.	Average rent
138	13	1	6	19	1	.....	19	1	10	15	4	5.72
139	7	......	1	8	......	....	6	2	......	6	2	5.50
140	39	2	21	61	1	.....	58	4	20	31	23	4.63
141	8	1	2	10	1	.....	9	2	......	7	2	9.75
142	16	......	4	20	......	.....	15	5	......	......	......	......
143	6	......	......	6	......	.....	4	2	......	......	......	......
144	8	......	......	8	......	.....	7	1	......	......	......	......
145	4	1	......	5	......	....	......	5	......	......	......	......
146	12	......	1	13	......	.....	11	2	......	......	......	......
147	13	......	......	13	......	.....	11	2	......	......	......	......
148	41	......	3	44	......	.....	29	15	......	......	......	......
149	2	......	......	2	......	.....	1	1	......	......	......	......
150	17	......	......	17	......	.....	12	5	......	......	......	......
Total and average..	186	5	38	226	3	.....	182	47	30	59	31	6.40

SHEET METAL GOODS.

Running number.	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.	No. who said father was working.	No. who said parents own home.	No. paying.	Average rent
151	2	1	2	5	......	....	5	......	......	......	......	......
152	71	......	......	69	1	1	51	20	......	......	......	......
153	185	1	21	205	2	.....	145	62	......	31	1	$3.00
154	10	......	......	10	......	.....	8	2	......	......	1	4.00
155	18	......	13	30	1	.....	30	1	......	......	......	......
156	2	1	......	3	......	.....	3	......	......	2	......	......
157	11	......	5	16	......	.....	15	1	14	12	......	......
Total and average..	299	3	41	338	4	1	257	86	14	45	2	$3.50

SPECIAL INSPECTION—TABLE I.—Continued.

TRUNKS AND VALISES.

Running number.	Total wage earners.	Wage Earners 16 or Under. Total 16 years or under.	Male.	Female.	Years. Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
158	325	46	30	16	15.1	20	26	......	10
159	110	7	7	......	15.3	4	3	......	10
160	305	19	19	......	15	11	8	1	10
161	125	11	11	......	14.9	5	6	......	10
162	130	4	3	1	15.8	2	2	......	8
163	90	13	11	2	14.6	8	5	......	10
Total and average	1,085	100	81	19	15.1	50	50	1	9.6

WAGONS, CARRIAGES AND SLEIGHS.

Running number.	Total wage earners.	Wage Earners 16 or Under. Total 16 years or under.	Male.	Female.	Years. Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
164	26	3	3	......	15.3	1	2	......	10
165	100	4	4	......	15.2	2	2	......	10
166	400	3	3	......	15.2	2	1	......	10
167	324	2	2	......	15	1	1	......	10
168	70	3	3	......	14.6	2	1	......	10
169	365	10	10	......	15.1	5	5	......	10
170	400	3	3	......	14.6	1	2	1	10
Total and average	1,685	28	28	......	15	14	14	1	10

WOOLEN AND WORSTED GOODS.

Running number.	Total wage earners.	Wage Earners 16 or Under. Total 16 years or under.	Male.	Female.	Years. Average age.	Average age or above.	Under average age.	Under 14 years of age.	Average hours of labor daily.
171	170	27	5	22	15.3	11	16	......	10
172	50	6	.....	6	14.3	4	2	1	10
173	75	3	2	1	14	3	......	......	10
174	72	2	1	1	16	1	1	......	10
175	150	8	2	6	15.2	6	2	......	10
176	80	3	2	1	15.3	2	1	......	10
Total and average	597	49	12	37	15.1	27	22	1	10

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			
TRUNKS AND VALISES.											
158	$2.64	$4.00	$2.00	14	32	30.7	24	30	22	24	8
159	2.78	3.50	2.00	4	3	21.4	18	21	4	3	3
160	2.14	4.00	1.50	5	14	35.5	30	21	7	12	6
161	$2.77	$3.60	$2.15	3	8	21.3	24	3	4	7	8
162	2.87	2.00	2.50	3	1	43	24	120	1	3	3
163	2.00	3.00	1.50	8	5	21.3	24	14	7	6	......
Total and average	$2.53	$3.51	$1.94	37	63	28.9	24.	15.5	45	55	28
WAGONS, CARRIAGES AND SLEIGHS.											
164	$1.66	$2.00	$1.50	1	2	5	2	4	2	1	2
165	3.67	3.90	3.60	1	3	18.7	12	21	1	3	3
166	3.25	3.50	2.75	2	1	7	4	6	1	2	2
167	3.42	3.60	3.25	1	1	7.5	3	12	1	1	2
168	3.00	3.00	3.00	3	.....	28	7	78	1	2	......
169	3.57	4.80	2.70	4	6	15.8	10	6	5	5	8
170	2.88	3.25	2.[illegible]	2	1	18.3	8	21	1	2	3
Total and average	$3.06	$3.43	$2.74	14	14	14.3	6.5	21.1	12	16	20
WOOLEN AND WORSTED GOODS.											
171	$2.18	$3.03	$1.50	17	10	28.6	30	1	10	17	......
172	2.28	3.20	1.20	4	2	18	12	6	3	3	......
173	2.40	2.40	2.40	3	.....	13	8	3	1	2	......
174	2.40	2.40	2.40	2	.....	26	12	3	1	1	1
175	3.09	3.25	3.00	3	5	26.1	12	6	4	4	4
176	4.10	4.50	3.90	2	1	15.3	8	30	1	2	3
Total and average	$2.74	$3.13	$2.40	31	18	21.1	13.6	8.1	20	29	8

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	PUBLIC SCHOOLS.						PAROCHIAL SCHOOLS.						BOTH SCHOOLS.		
	Number attending.	*Years.*			Average or above.	Below average.	Number attending.	*Years.*			Average or above.	Below average.	Number attending.	*Years.*	
		Average.	Highest.	Lowest.				Average.	Highest.	Lowest.				Av. in public.	Av. in parochial.
TRUNKS AND VALISES.															
158	8	6.5	9	4	4	4	32	5.7	9	1	20	12	6	2.6	5.1
159	2	7.5	8	7	1	1	5	5.2	6	4	3	2	....	....	....
160	4	6.2	8	4	2	2	12	4.5	7	1	6	6	3	2	3
161	8	6	9	1	5	3	1	6	6	6	1	....	2	3.5	4
162	2	5.5	6	5	1	1	1	8	8	8	1	....	1	5	4
163	5	7	9	5	3	2	5	6.5	8	5	2	3	3	3	3.5
Total and average	29	6.4	8.1	4.3	16	13	56	5.9	7.3	4.1	33	23	15	3.2	3.9
WAGONS, CARRIAGES AND SLEIGHS.															
164	1	9	9	9	1	...	1	6	6	6	1	....	1	4	3
165	2	6.5	7	6	1	1	2	4.5	5	4	1	1	....	....	....
166	....	....	....	....	....	...	1	8	8	8	1	....	2	2.5	4.5
167	1	5	5	5	1	....	....	....	....	....	....	....	1	4	4
168	....	....	....	....	....	..	2	7	7	7	2	....	1	1	7
169	8	7.5	9	6	3	5	2	3	5	1	1	1	....	....	....
170	2	6	8	4	1	1	1	5	5	5	1	....	....	....	....
Total and average	14	6.8	7.6	6	7	7	9	5.6	6	5.1	7	2	5	2.5	5.1
WOOLEN AND WORSTED GOODS.															
171	7	5.5	8	1	4	3	20	4.6	9	6	11	9	....	....	....
172	1	9	9	9	1	...	5	7	8	3	4	1	....	....	....
173	1	7	7	7	1	...	1	6	6	6	1	....	1	4	4
174	....	....	....	....	....	...	2	8.5	9	8	1	1	....	....	....
175	2	7	8	6	1	1	3	7	8	6	1	2	3	4.6	2.6
176	....	....	....	....	....	...	1	6	6	6	1	....	2	3	4.5
Total anu average	11	7.1	8	5.7	7	4	32	6.5	7.6	4.8	19	13	6	3.8	3.7

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
TRUNKS AND VALISES.												
158	30	1	15	44	2	......	25	21	......	......	3	$5.00
159	2	1	4	7	......	......	4	3	1	3	1	3.50
160	10	......	9	18	1	......	9	10	......	......	......	......
161	5	1	5	11	......	......	6	5	......	......	......	......
162	4	......	......	4	......	......	2	2	......	......	......	......
163	13	......	......	13	......	......	7	6	......	......	......	......
Total and average	64	3	33	97	3	......	53	47	1	3	4	$4.25
WAGONS, CARRIAGES AND SLEIGHS.												
164	3	......	......	3	......	......	......	3	......	1	......	......
165	2	......	2	4	......	......	3	1	......	......	......	......
166	3	......	......	3	......	......	1	2	......	......	......	......
167	2	......	......	2	......	......	1	1	......	......	......	......
168	3	......	......	3	......	......	1	2	......	......	......	......
169	4	......	6	10	......	......	8	2	......	......	......	......
170	1	......	2	3	......	......	2	1	......	......	......	......
Total and average	18	......	10	28	......	......	16	12	......	1	......	......
WOOLEN AND WORSTED GOODS.												
171	18	1	8	26	1	......	20	7	15	13	5	$5.50
172	6	......	......	6	......	......	6	......	6	6	......	......
173	2	......	1	3	......	......	3	......	......	......	......	......
174	2	......	......	2	......	......	1	1	......	......	......	......
175	8	......	......	8	......	......	2	6	......	......	......	......
176	1	1	1	3	......	......	1	2	......	......	......	......
Total and average	37	2	10	48	1	......	33	16	21	19	5	$5.50

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Total wage earners.	Wage Earners 16 or Under.							Average hours of labor daily.
		Total 16 years or under.	Male.	Female.	Years.		Under average age.	Under 14 years of age.	
					Average age.	Average age or above.			
MISCELLANEOUS.									
177	16	5	5	......	15.5	3	2	1	10
178	525	54	53	1	15.2	27	27	2	10
179	15	3	3	......	15.4	2	1	......	10
180	225	8	6	2	15.1	5	3	1	10
181	110	3	3	......	15.1	2	1	......	10
182	375	4	4	......	14.7	2	2	......	10
183	55	7	7	......	14.5	5	2	2	7
184	70	6	6	......	14.4	4	2	2	10
185	211	21	12	9	15.4	9	12	......	10
186	125	5	5	......	16.6	4	1	......	10
187	80	4	3	1	14.8	2	2	......	10
188	250	21	12	9	15.5	11	10	......	10
189	80	10	4	6	14.5	4	6	......	10
190	100	11	......	11	14.7	9	2	......	9
191	53	3	2	1	15.3	1	2	......	10
192	27	2	2	......	15.2	1	1	......	10
193	12	3	......	3	14.9	1	2	......	9
194	305	31	......	31	14.7	19	12	......	10
195	50	16	16	......	15.2	10	6	......	10
196	60	2	2	......	14.9	1	1	......	10
197	38	23	......	23	15.2	12	11	......	10
198	90	14	3	11	15.8	10	4	......	10
199	15	2	2	......	14.4	1	1	......	10
200	60	5	1	4	15.1	4	1	......	10
201	54	9	1	8	14.8	8	1	1	10
202	61	3	3	......	14.7	2	1	......	10
203	29	4	......	4	14.9	3	1	......	10
204	90	11	......	11	15.8	7	4	......	10
205	350	14	......	14	15.3	8	6	......	9
206	300	20	2	18	15.1	9	11	......	10
207	160	37	29	8	15.5	23	14	......	10
208	197	19	19	......	15	13	6	2	10
209	32	3	3	......	14	2	1	1	10
210	60	9	9	......	14.5	6	3	2	10
211	82	7	7	......	14.7	4	3	1	10
212	1,100	58	58	......	14.6	36	22	9	10
213	10	3	3	......	13.7	2	1	3	10
214	25	3	3	......	15.3	1	2	......	10
215	217	38	3	35	14.9	22	16	4	10
Total and average......	5,714	501	291	210	14.9	295	206	31	9.8

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Wages.					Time in Present Employ.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest.			
MISCELLANEOUS.											
177	$2.80	$3.50	$1.50	4	1	8.2	6	2	2	3	2
178	2.88	5.00	1.87	21	33	27.7	30	12	17	37	20
179	3.00	3.00	3.00	3	.....	36.6	24	12	1	2	1
180	2.51	2.70	2.10	5	3	48.3	15	36	3	5	2
181	3.17	3.50	3.00	1	2	9	6	3	1	2	2
182	2.00	2.00	2.00	4	.....	13.2	6	12	2	2	.....
183	3.53	4.00	3.12	3	4	14.9	12	12	2	5	2
184	2.29	2.50	2.00	2	4	14.5	4	12	2	4	.....
185	2.42	4.00	2.00	12	9	29.2	36	12	5	16	6
186	3.60	4.00	3.00	2	3	58	24	6	2	3	1
187	3.25	4.00	3.00	1	3	4	1½	6	1	3	.....
188	2.77	3.00	2.10	13	8	39.7	24	6	10	11	5
189	4.20	4.20	4.20	10	.....	4.3	1	30	10	.....	.....
190	2.30	3.25	1.50	4	7	44.9	18	9	6	5	7
191	2.00	2.00	2.00	3	.....	12	3	60	2	1	.....
192	3.00	3.00	3.00	2	.....	15.5	7	6	1	1	1
193	2.55	3.00	2.30	1	2	14.3	4	60	2	1	.....
194	2.22	3.75	1.50	15	16	17.5	18	3	10	21	3
195	3.42	5.00	1.70	6	10	15.3	24	1	3	13	6
196	3.00	3.00	3.00	2	.....	31	12	60	1	1	.....
197	3.03	3.75	2.25	9	14	29.1	24	1	12	11	1
198	2.25	3.50	1.75	8	6	47.4	36	10	5	9	.....
199	2.00	2.00	2.00	2	.....	2.5	1	6	1	1	.....
200	2.20	2.50	2.00	2	3	22.6	12	78	2	3	3
201	3.77	4.15	2.75	1	8	18.8	8	6	3	6	2
202	3.16	3.50	2.50	2	1	16	8	2	1	2	1
203	2.81	3.25	2.50	2	2	27.2	12	12	2	2	.....
204	2.76	3.25	2.35	2	9	15.2	5	18	7	4	.....
205	3.62	6.50	2.10	3	11	26	12	60	8	6	2
206	2.14	4.75	2.00	11	9	15.2	28	2	5	15	5
207	2.40	4.00	1.50	17	20	49.7	36	1	15	22	10
208	2.35	2.70	1.80	8	11	28.2	12	5	11	8	7
209	1.70	2.10	1.50	1	2	4.2	1½	6	2	1	1
210	2.93	3.60	2.40	7	2	15	12	4	2	7	1
211	2.65	3.00	2.40	3	4	8.9	4	30	2	5	8
212	2.87	4.50	2.10	25	33	36.5	36	1	22	36	1
213	1.50	1.50	1.50	3	.....	2	½	1	3	.....	.....
214	2.53	3.00	2.10	1	2	4.2	1¼	6	2	1	1
215	2.62	4.00	1.00	20	18	28.3	24	24	16	22	9
Total and average..	$2.72	$3.43	$2.21	241	260	21.9	14.3	16.1	204	297	105

SPECIAL INSPECTION—TABLE I.—Continued.

Running number.	Public Schools.						Parochial Schools.						Both Schools.		
	Number attending.	Years.			Average or above.	Below average.	Number attending.	Years.			Average or above.	Below average.	Number attending.	Years.	
		Average.	Highest.	Lowest.				Average.	Highest.	Lowest.				Av. in public.	Av. in parochial.
MISCELLANEOUS.															
177	1	7	7	7	1	....	3	5.6	7	5	1	2	1	3	3
178	21	6.5	9	4	12	9	32	5.5	8	2	17	15	1	4	4
179	2	6	6	6	2	....	...	....	....	....	....	....	1	3	3
180	....	....	....	....	....	....	7	6.7	8	5	5	2	1	4	4
181	1	8	8	8	1	....	2	7.5	8	7	1	1	....	....	....
182	3	8.3	10	7	1	2	1	6	6	6	1	....	....	....	....
183	5	5.6	6	4	4	1	1	6	6	6	1	....	1	4	3
184	4	7.7	9	7	2	2	2	8.5	9	8	1	1	....	....	....
185	7	7.1	9	6	3	4	14	5	8	3	11	3	....	....	....
186	4	7.7	8	7	3	1	1	7	7	7	1	....	....	....	....
187	3	8	8	8	2	1	1	7	7	7	1	....	....	....	....
188	11	6.2	8	5	4	7	8	6.6	7	5	5	3	2	1.5	5.5
189	10	7.8	9	6	6	4	...	....	....	....	....	....	....	....	....
190	3	6	7	5	2	1	8	6.8	8	6	6	2	....	....	....
191	3	7	8	5	2	1	...	....	....	....	....	....	....	....	....
192	....	....	....	....	....	....	2	8	8	8	2	....	....	....	....
193	1	7	7	7	1	....	2	6	6	6	2	....	....	....	....
194	1	5	5	5	1	....	30	2.5	6	1	15	15	....	....	....
195	5	7.4	8	5	3	2	10	5.6	8	3	6	4	1	4	4
196	1	6	6	6	1	....	1	6	6	6	1	....	....	....	....
197	8	6.6	8	5	2	1	20	5.9	9	5	13	7	....	....	....
198	9	7.2	9	4	5	4	5	7.2	8	6	2	3	....	....	....
199	1	7	7	7	1	....	1	6	6	6	1	....	....	....	....
200	5	7.4	9	6	2	3	...	....	....	....	....	....	....	....	....
201	6	6.3	8	3	4	2	3	5.3	6	5	1	2	....	....	....
202	....	....	....	....	....	....	3	7	7	7	3	....	....	....	....
203	1	5	5	5	1	....	3	4	5	3	2	1	....	....	....
204	5	5.6	10	¼	4	1	6	6.8	8	3	5	1	....	....	....
205	3	7	8	6	2	1	9	6.1	8	5	4	5	2	3.5	3
206	9	7	9	6	5	4	10	5.8	8	4	5	5	1	5	2
207	12	6.5	9	2	8	4	25	5.5	9	1-6	11	14	....	....	....
208	6	7.5	9	5	4	2	8	6.9	8	4	6	2	5	4.6	3
209	....	....	....	....	....	....	3	6.6	8	5	2	1	....	....	....
210	4	7.5	9	7	3	1	...	....	....	....	....	....	5	5	1.3
211	4	7.5	8	7	2	2	...	....	....	....	....	....	3	3	4
212	8	6.6	8	5	4	4	37	6.1	9	2	18	19	13	2.7	3.8
213	3	6	6	6	3	....	...	....	....	....	....	....	....	....	....
214	2	8	9	7	1	1	...	....	....	....	....	....	1	1	8
215	3	7.3	8	6	2	1	28	6.5	8	5	15	13	7	3	3
Total and average..	170	6.8	7.9	5.6	104	66	286	6.2	7.4	4.9	165	121	45	3.4	3.6

SPECIAL INSPECTION—TABLE I.—Continued.

MISCELLANEOUS.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
177	3	1	1	5			5					
178	42	4	8	53		1	47	7	15	17	4	$5.50
179	3			3			2	1		1	1	4.00
180	8			8			4	4				
181	2	1		3				3				
182	3	1		4			4		3	3	1	7.00
183	6	1		7			7			4	2	4.00
184	4	2		6			5	1	4	4	1	4.00
185	16	5		21			16	5	18	17	2	4.25
186	4	1		5			1	4	4	5		
187	2	2		4			3	1				
188	18		3	21			6	15				
189	10			10			5	5				
190	10		1	11			9	2				
191	3			3			2	1				
192	2			2			2					
193	2	1		3			1	2				
194	18	1	12	31			26	5		2	2	3.12
195	11	1	4	15	1		14	2	8	10	2	10.50
196	2			2			2					
197	12	6	5	23			8	15	10	8	11	3.20
198	11	1	2	14			12	2	10	12		
199	2			2			2			1	1	7.00
200	4		1	5			2	3	3	3		
201	9			9			8	1		4	1	9.00
202	3			3			2	1				
203	4			4			2	2	3	3	1	10.00
204	10		1	11			8	3		5		
205	12		2	14			12	2	11	9		
206	18		2	20			19	1		7	8	6.87
207	30		7	37			30	7	17	23		
208	19			19			14	5				
209	3			3			3			2		
210	8		1	9			7	2				
211	6		1	7			7					
212	42		16	56	2		50	8				
213	1		2	3			3					
214	2		1	3			1	2				
215	38			38			28	10				
Total and average	403	28	70	497	3	1	379	122	106	140	37	$6.03

TABLE II.—CLASSIFICATION AS TO INDUSTRIES.

Running number.	Running number.	Total wage earners.	WAGE EARNERS 16 OR UNDER.							Average hours of labor daily.
			Total 16 years or under.	Male.	Female.	*Years.*		Under average age.	Under 14 years of age.	
						Average age.	Av. age or above.			
1.......	Agricultural implements	1,213	23	23	....	14.7	13	10	1	10
2.......	Bicycles	821	49	49	....	14.5	25	24	6	10
3.......	Boots and shoes.....................	1,098	97	58	39	14.9	57	40	7	9.6
4.......	Boxes, wooden and paper..........	1,014	171	100	71	15.1	93	78	7	10
5.......	Brick	232	17	17	....	14.9	10	7	4	10
6.......	Brooms, brushes and baskets.....	97	18	18	....	14.3	11	7	3	9.2
7.......	Chairs	2,969	202	146	56	15.2	117	85	16	9.9
8.......	Cigars and tobacco..................	441	48	35	13	14.8	33	15	3	9.4
9.......	Clothing	606	47	10	37	15.3	28	19	....	9.7
10.......	Confectionery, crackers, etc......	744	152	38	114	15	86	66	5	10
11.......	Cotton and linen goods............	512	35	21	14	14.8	20	15	4	11
12.......	Furniture	1,655	116	116	....	14.9	70	46	3	9.9
13.......	Iron goods, malleable..............	2,302	180	178	2	14.9	95	85	8	9.9
14.......	Knit goods	2,063	502	76	426	14.8	232	270	12	10
15.......	Lager beer, bottling................	2,509	135	64	71	15.2	90	45	....	9.9
16.......	Lithographing	303	39	39	....	15.1	23	16	1	9.8
17.......	Lumber, lath and shingles.........	734	100	100	....	15.5	38	62	16	10
18.......	Mixed textiles	377	154	64	90	15.1	82	72	8	10
19.......	Office and saloon furniture........	515	25	25	....	14.9	14	11	3	10
20.......	Sash, doors, blinds and moulding.	2,787	229	219	10	15.1	126	103	10	9.4
21.......	Sheet metal goods..................	1.732	343	268	75	15	187	156	4	10
22.......	Trunks and valises..................	1,085	100	81	19	15.1	50	50	1	9.6
23.......	Wagons, carriages and sleighs....	1,685	28	28	....	15	14	14	1	10
24.......	Woolen and worsted goods........	597	49	12	37	15.1	27	22	1	10
25.......	Miscellaneous	5,714	501	291	210	14.9	295	206	31	9.8
	Total and average............	33,805	3360	2076	1284	14.9	1836	1524	155	9.9

TABLE II.—CLASSIFICATION AS TO INDUSTRIES.—Continued.

Running number.	WAGES.					TIME IN PRESENT EMPLOY.					No. having had previous employers.
	Weekly.			Average or above.	Less than average.	*Wks.*	*Mos.*	*Days*	Average or above.	Under average.	
	Average wages.	Highest wages.	Lowest.			Average.	Highest.	Lowest			
1	$3.50	$4.22	$2.92	10	13	22.5	14.7	17	8	15	10
2	3.22	4.00	2.84	22	27	13.9	11.4	11.1	16	33	25
3	2.26	3.00	1.76	35	62	37.7	24.2	52.8	35	62	32
4	2.71	2.40	2.30	76	95	17.7	11.1	19.3	66	105	47
5	2.86	3.25	2.78	7	10	9.4	3.8	18	7	10	7
6	2.46	2.81	2.09	11	7	18.5	7.5	10	8	10	5
7	2.35	3.07	1.90	97	105	26.1	18.2	3.7	76	126	55
8	2.53	3.19	2.19	23	25	23.6	11.8	27.3	22	26	14
9	2.41	2.96	2.01	18	29	20.5	12.8	28.5	19	28	4
10	1.96	2.68	1.64	59	93	25.6	17.6	4.8	62	90	25
11	3.07	3.88	3.30	20	15	24.4	16.3	8.6	14	21	2
12	2.77	3.40	2.37	35	81	21.7	14.2	25.8	46	70	33
13	2.94	3.94	2.41	69	111	19.8	15	11.1	60	120	86
14	2.38	4.31	1.68	208	294	27.2	23	12.7	167	335	105
15	3.00	3.73	2.66	45	90	21.1	13.6	10.3	57	78	48
16	2.57	3.30	1.97	17	22	38.4	26.2	13.6	16	23	12
17	3.31	4.02	2.82	60	40	19.6	12.8	6.6	33	67	4
18	2.39	3.54	1.81	73	81	27.8	21.1	8.2	40	114	31
19	2.75	3.39	2.34	9	16	29.1	17	29.2	10	15	17
20	2.39	3.14	2.02	106	123	22.7	20	15.7	83	146	89
21	2.41	3.07	2.03	143	200	22.6	16.7	3.5	134	209	122
22	2.53	3.51	1.94	37	63	28.9	24	15.5	45	55	28
23	3.06	3.43	2.74	14	14	14.8	6.5	21.1	12	16	20
24	2.74	3.13	2.40	31	18	21.1	13.6	8.1	20	29	8
25	2.72	3.43	2.21	241	260	21.9	14.3	16.1	204	297	105
Total and average..	$2.69	$3.38	$2.28	1,466	1,894	23	15.5	15.9	1,260	2,100	934

TABLE II.—CLASSIFICATION AS TO INDUSTRIES.—Continued.

Running number.	PUBLIC SCHOOLS.						PAROCHIAL SCHOOLS.						BOTH SCHOOLS.		
	Number attending.	*Years.*			Average or above.	Below average.	Number attending.	*Years*			Average or above.	Below average.	Number attending.	*Years.*	
		Average.	Highest.	Lowest.				Average.	Highest.	Lowest.				Av. in public	Av. in parochial.
1	11	6.1	7.7	5	6	5	10	6.3	7	5.3	7	3	2	4	2.5
2	27	5.8	7.7	5.8	12	15	14	6.2	6.5	5.8	10	4	8	2.9	4.7
3	41	6.2	8.3	4.6	18	23	48	6.2	7.5	5	32	16	8	3.7	4.4
4	67	5.9	8.5	5.7	39	28	60	6.6	7.6	5.7	35	25	44	3.2	3.5
5	9	6.7	8	5.3	5	4	8	5.2	5.5	5	7	1	....	....	....
6	11	6.6	7.2	6.5	6	5	4	4.5	5	4	2	2	3	3.5	2.7
7	63	6.9	8.2	5	32	31	91	6.6	7.8	4.6	44	47	44	3.6	3.7
8	11	6.8	7.2	6.4	8	3	26	6.1	6.8	5.4	15	11	11	2.9	3.2
9	25	7.3	8.2	6.4	17	8	16	6.8	7.8	5.6	9	7	6	3.8	3.4
10	60	7	8.2	5.5	35	25	83	6	8	3.7	51	32	9	3.6	3.7
11	3	4.5	5.5	3.5	2	1	23	5.8	7	5	15	8	9	2.5	4.1
12	49	6.8	7.6	6	30	19	45	6	7.1	5	24	21	22	3.2	3.8
13	49	6.6	7.7	5.5	27	22	112	5.6	6.9	4	61	51	19	4.5	3.1
14	106	6.8	8.6	4.4	57	49	352	6.4	8.3	4.3	192	160	44	2.8	3.8
15	42	6.6	7.6	5	30	12	89	5.6	7.6	3.8	45	44	4	2.7	4.3
16	22	7.5	8	6.2	11	11	17	6.9	8	6	8	9	....	....	....
17	56	6.7	8	5	39	17	13	6.9	8	6.6	9	4	29	3.8	3.1
18	27	7.5	9	5.2	13	14	125	6.5	8.5	4	62	63	2	3	3.5
19	11	6.1	6.8	5.5	7	4	11	6.7	7.4	6.2	6	5	2	2.5	4
20	55	6.8	8.2	5.6	32	[illegible]	143	6.2	7.6	4.6	72	71	29	3.6	3.3
21	65	5.7	7.1	3.7	40	25	260	5.5	7.8	3	148	112	18	3.5	3.7
22	29	6.4	8.1	4.3	16	13	56	5.6	7.3	4.1	33	23	15	3.2	3.9
23	14	6.8	7.6	6	7	7	9	5.6	6	5.1	7	2	5	2.5	5.1
24	11	7.1	8	5.7	7	4	32	6.5	7.6	4.8	19	13	6	3.8	3.7
25	170	6.8	7.9	5.6	104	66	286	6.2	7.4	4.9	165	121	45	3.4	3.6
Total and average..	1034	6.5	7.8	5.3	600	434	1933	6.1	7.3	4.8	1078	855	384	3.	3.3

TABLE II.—CLASSIFICATION AS TO INDUSTRIES.—Continued.

Running number.	Where Born.			With whom Living.			Occupat'n of Father.		No. who said father was working.	No. who said parents own home.	Rent.	
	Wisconsin.	Other states.	Germany.	With one or both parents.	Other relatives.	Boarding.	Labor.	Trade.			No. paying.	Average rent.
1	22	......	1	23	......	......	13	10	......	12	2	$5.75
2	31	5	13	46	3	......	33	16	7	12	3	6.33
3	74	10	13	96	1	......	61	36	27	27	14	6.79
4	126	7	35	165	3	......	132	39	39	44	6	4.74
5	13	......	4	16	1	......	12	5	2	13	2	3.50
6	14	2	2	18	......	......	12	6	2	5	2	7.75
7	187	2	13	199	2	1	125	77	41	38	2	9.75
8	47	......	1	48	......	......	43	5	......	11	1	5.00
9	36	4	7	46	1	......	22	25	17	16	8	5.86
10	119	13	20	150	2	......	104	48	79	66	34	5.77
11	26	......	9	35	......	......	26	9	......	2	......	......
12	105	5	6	113	2	1	72	44	......	......	......	......
13	136	6	38	177	3	......	130	50	28	76	17	4.00
14	348	27	127	495	7	......	398	104	9	22	4	5.87
15	95	5	35	135	......	......	120	15	34	91	24	5.02
16	30	6	3	39	......	......	28	11	13	20	9	6.61
17	76	10	14	99	1	......	69	31	2	2	1	7.00
18	110	5	39	151	3	......	130	24	34	42	1	3.50
19	16	2	7	25	......	......	16	9	4	3	3	6.37
20	186	5	38	226	3	......	182	47	30	59	31	6.40
21	299	3	41	338	4	1	257	86	14	45	2	3.50
22	64	3	33	97	3	......	53	47	1	3	4	4.25
23	18	......	10	28	......	......	16	12	......	1	......	......
24	37	2	10	48	1	......	33	16	21	19	5	5.50
25	403	28	70	497	3	1	379	122	106	140	37	6.03
Total and average..	2,618	150	592	3,313	43	4	2,466	894	510	769	212	5.69

ANALYSIS.

The facts presented in the two foregoing tables have been compiled and computed from the reports of 3,360 children, sixteen years of age or under, and employed in 215 establishments in the different manufacturing centers in this state. These 215 establishments employed in all 33,805 wage-workers and are classified into twenty-five industries.

As already explained this investigation was made the subject of a special inspection, and, while important in other respects, was made mainly for the purpose of enabling us to more completely enforce the laws which regulate the labor of children under fourteen years of age.

The data thus collected and presented needs further analysis. For this purpose the leading facts were again taken up and, together with a few explanations, presented in such way as to make their meaning and relative importance clearer.

Persons employed: In the following table we find the number of classified industries and the number of establishments included in each; also the total number of wage-earners employed, the total for each industry, and the proportion of wage-earners sixteen years of age or under.

PROPORTION 16 YEARS OF AGE OR UNDER.

	No. of establishments included.	WAGE EARNERS.		Percentage 16 years or under.
		Total No. employed.	Total 16 yrs. of age or under.	
Agricultural implements	5	1,213	23	1.89
Bicycles	7	821	49	5.96
Boots and shoes	7	1,098	97	8.83
Boxes (wooden and paper)	12	1,014	171	16.86
Brick	4	232	17	7.33
Brooms, brushes and baskets	4	97	18	18.57
Chairs	11	2,969	202	6.80
Cigars and tobacco	9	441	48	10.88
Clothing	6	606	47	7.75
Confectionery, crackers, etc	9	744	152	20.44

PROPORTION 16 YEARS OF AGE OR UNDER—Continued.

	No. of establishments included.	WAGE EARNERS.		Percentage 16 years or under.
		Total No. employed	Total 16 yrs. of age or under.	
Cotton and linen goods	3	512	35	6.83
Furniture	12	1,655	116	7.01
Iron goods (malleable)	12	2,302	180	7.82
Knit goods	10	2,063	502	24.33
Lager beer (bottling)	7	2,509	135	5.38
Lithographing	5	303	39	12.87
Lumber, lath and shingles	5	734	100	13.62
Mixed textiles	4	377	154	40.85
Office and saloon fixtures	5	515	25	4.85
Sash, doors, blinds, and moulding	13	2,787	229	8.21
Sheet metal goods	7	1,732	343	19.80
Trunks and valises	6	1,085	100	9.21
Wagons, carriages and sleighs	7	1,685	28	1.66
Woolen and worsted goods	6	597	49	8.21
Miscellaneous	39	5,714	501	8.76
Total	215	33,805	3,360	9.90

The above table shows that 215 establishments classified into 25 industries are included in this investigation. These places or industries were picked out for this inspection mainly because they are the ones in this state in which children are mostly employed to any great extent, and in which complaints of such labor are heard.

The number of persons employed in these places was 33,805. Excluding brick, cigars and lumber, which are perhaps inadequately represented, the number of wage-earners is reduced to 32,398. At the general inspection in 1897, in which practically all the plants in the state were included, the total number of hands employed in these industries was 44,156. A comparison of these two items will show that this investigation includes about 75 per cent. of the productive capacity of the industries covered. For the results arrived at, it may therefore safely be claimed, that they are fairly representative of actual condition in the state.

In these 215 factories 3,360 children, sixteen years of age or under, were employed. As the total number of wage-earners in these plants was 33,805, the number of children under this age constituted practically 10 per cent. of the total. The percentage of children varied greatly as between the different industries. Thus, in some industries it was very high, in others, low. Mixed textiles, for instance, show that almost 41 per cent. of their operatives were 16 years of age or under. This is the highest of those included. Next in order comes knit goods with more than 24 per cent; confectionery, etc., with nearly 21 per cent.; sheet metal or tinware with about 20 per cent.; brooms, brushes and baskets with nearly 19 per cent. In four other industries the percentage exceeded 10 per cent., while in sixteen industries it was less than 10 per cent. The lowest was found in agricultural implements and wagons, carriages and sleighs, where it was below 2 per cent.

The term "Miscellaneous" as used in the foregoing table means industries not classified. Many establishments were inspected of which only from one to three could properly have been classified under the same industry. Separate classification in these cases would, perhaps, have led to undue publicity. In order to avoid this it was thought best, instead of the usual classification, to treat all these industries as one or under some one designation. Under miscellaneous, therefore, are included several separate industries. As the figures indicate, the establishments in these, also employed a large number of persons. On the whole, however, they are not largely represented in this state. The places inspected constituted in many cases the entire number. While their inspection was important any further classification was not so regarded.

In the following table the children included are classified as to sex:

PERCENTAGE OF MALES AND FEMALES; OF CHILDREN 16 YEARS OF AGE OR UNDER.

Industries.	No establishments.	Total under 16 years employed.	Males under 16 years of age.	Females under 16 years of age.	Percentage of male.	Percentage of female.
Agricultural implements	5	23	23	....	100.	....
Bicycles	7	49	49	....	100.	....
Boots and shoes	7	97	58	39	59.80	40.20
Boxes, wooden and paper	12	171	100	71	58.48	41.52
Brick	4	17	17	....	100.	....
Brooms, brushes and baskets	4	18	18	....	100.	....
Chairs	11	202	146	56	72.28	27.72
Cigars and tobacco	9	48	35	13	72.92	27.08
Clothing	6	47	10	37	21.28	78.72
Confectionery, crackers, etc	9	152	38	114	25.	75.
Cotton and linen goods	3	35	21	14	60.	40.
Furniture	12	116	116	....	100.	....
Iron goods (malleable)	12	180	178	2	98.89	1.11
Knit goods	10	502	76	426	15.14	84.86
Lager beer (bottling)	7	135	64	71	47.41	52.59
Lithographing	5	39	39	....	100.	....
Lumber, lath and shingles	5	100	100	....	100.	....
Mixed textiles	4	154	64	90	41.56	58.44
Office and saloon fixtures	5	25	25	....	100.	....
Sash, doors, blinds and moulding	13	229	219	10	95.63	4.37
Sheet metal goods	7	343	268	75	78.13	21.87
Trunks	6	100	81	19	81.	19.
Wagons, carriages and sleighs	7	28	28	....	100.	....
Woolen and worsted goods	6	49	12	37	24.49	75.51
Miscellaneous	39	501	291	210	58.08	41.92
Total	215	3,360	2,076	1,284	61.79	38.21

We see from the above table that of the 3,360 children employed, 2,076, or 61.79 per cent. were boys, and 1,284, or 38.21 per cent. were girls. The boys were to a greater or less extent employed in all the industries, but in the following no girls were found: Agricultural implements, bicycles, brick, brooms, etc., furniture, lithographing, lumber, etc., office fixtures, wagons, carriages, etc.

In the industries where both were employed the following employed more boys than girls: Boots and shoes, boxes, chairs, cigars and tobacco, cotton and linen goods, iron goods, sash, doors and blinds, sheet metal goods, trunks, etc., miscellaneous.

The following employed more girls than boys: Clothing, confectionery, knit goods, bottling departments beer, mixed textiles, woolen and worsted goods.

Going back to table II we find that the average age of the children included is 14.9 years. As these figures are given for each industry it may also be seen in which ones among them the highest and lowest average age was found. The highest average age was 15.5 and this is shown for lumber, etc. The lowest, or 14.3 years was found in brooms, brushes and baskets.

In this connection this table also reveals a few other interesting facts. Thus we find that 1,836, or 55 per cent. of the children were of average age or above, while 1,524, or 45 per cent. were under the average age. This means that, of the children sixteen years of age or under employed in the different manufacturing industries in question, 45 per cent. were under 14.9 years of age.

There is another column under the age statistics in table II which will attract considerable attention, and to obtain reliable data concerning which was the main object of this investigation. This column relates to the number of children under fourteen years of age which were found at work in the different factories, etc. The figures here show that of the total number examined, 155, or 4.6 per cent. were under this age. To many this proportion will undoubtedly appear unduly large. It is also greater than it ought to be. Considering, however, what was said in the introduction to this part and also the fact that the Bureau is provided with two regular inspectors only for the whole state, it is almost surprising that the number was not greater. It can be said without qualifications, that but for the vigilance of the inspectors the number under fourteen would have been many times as great.

As this investigation was very thorough and covered practically all extensive employers of child labor in the state, and as it has been followed up with several subsequent inspections, it can be safely said here that the children under fourteen, or the legal limit, thus detected and dismissed have not been replaced by others under this age unless provided with the requisite permit to this effect. The amount of illegal child labor in this state has therefore been reduced to a minimum. In fact this investigation was the means of practically abolishing child labor in our manufacturing centers. Through it the condition in this respect was probed to the bottom. With proper vigilance in the future or from now on the state thus reached may also be maintained, especially if the inspection service is increased by a few additional and efficient factory inspectors.

Children under fourteen years of age and employed in violation of the law were discovered and discharged in all the industries covered except "clothing" and "beer bottling." These two industries are usually heavy employers of child labor and there is no exception to this rule now. At the time of this inspection, however, they were found to be complying with the law. One reason for this can probably be traced to the greater watchfulness of the inspectors to which particularly the bottling establishments have been subjected of late. For some time past and up to less than one year ago more complaints of child labor reached this Bureau from these than from any other industry. This naturally caused them to be more frequently and closely inspected than most others. The result is plain. In this, therefore, we have a splendid illustration of what may be accomplished, in the way of abolishing illegal child labor, by a sufficiently strong and efficient system of factory inspection.

The interest attached to these figures certainly warrants further comparisons. For this purpose as well as for convenience the following presentation is included:

PROPORTION OF CHILDREN UNDER 14 YEARS OF AGE.

Industries.	No. establishments.	No children 16 years of age or under.	Number under 14 years of age.	Percentage.
Agricultural implements	5	23	1	4.35
Bicycles	7	49	6	12.24
Boots and shoes	7	97	7	7.27
Boxes, wooden and paper	12	171	7	4.09
Brick	4	17	4	23.53
Brooms, brushes and baskets	4	18	3	16.66
Chairs	11	202	16	7.92
Cigars and tobacco	9	48	3	6.25
Clothing	6	47	......	......
Confectionery, crackers, etc	9	152	5	3.29
Cotton and linen mills	3	35	4	11.43
Furniture	12	116	3	2.59
Iron goods, malleable	12	180	8	4.40
Knit goods	10	502	12	2.39
Lager beer, bottling	7	135	......	......
Lithographing	5	39	1	2.57
Lumber, lath and shingles	5	100	16	16.00
Mixed textiles	4	154	8	5.19
Office, etc., fixtures	5	25	3	12.00
Sash, doors and blinds	13	229	10	4.37
Sheet metal goods, tinware	7	343	4	1.16
Trunks and valises	6	100	1	1.00
Wagons, carriages and sleighs	7	28	1	3.57
Woolen and worsted goods	6	49	1	2.05
Miscellaneous	39	501	31	6.18
Total	215	3.360	155	4.60

The above table shows, for each of the industries included, the number of children sixteen years of age or under; also the number or proportion of these who were under fourteen years of age. As to the children in the first group comparisons with the total number employed have been made already. Comparisons of those in the second group, or children under fourteen have also been made in a general way, but to what has thus been said, there is much to add. Examining the above table in relation to the number under forteen, employed in the different industries, we find that, outside of the Miscellaneous which shows 31 children, chairs and lumber, etc., show the greatest number, or 16 children each. Next in order is knit goods with 12, sash, doors and blinds with 10, iron goods and mixed textiles with 8 each, and boots and shoes, and boxes, etc., with 7 children each. In the remaining industries the number varies from 6 down. The comparisons thus made relate to the actual number employed only, and not to the relation of these to the total number included.

The percentage of children under fourteen based upon the total children included is also shown. In this case bricks ranks the highest showing a proportion of 23.53 per cent. Next in order are brooms, brushes and baskets with 16.66 per cent., lumber, lath and shingles with 16 per cent. Bicycles, office fixtures, and cotton and linen mills each show about 12 per cent. Boots and shoes and chairs, show about 8 per cent. Cigars and tobacco, and Miscellaneous about 6 per cent. Mixed textiles 5.19 per cent., agricultural implements, boxes, iron goods, sash, doors and blinds slightly more than 4 per cent. each. Wagons, carriages, etc., 3.57 per cent., confectionery, etc., 3.29 per cent., furniture 2.59 per cent., knit goods 2.39 per cent., lithographing 2.57 per cent., woolen and worsted goods 2.05 per cent. Sheet metal goods, and trunks and valises, show the lowest percentage of children under fourteen years of age or only 1.16 and 1.00 per cent. respectively.

Wages: As already explained the wages received was among the information obtained from every child included. As individual returns could not be presented only the average, the maximum and minimum wages could be included. Table I shows the average, the highest and lowest wages for each establishment included in the different industries. Table II shows the average, the average highest and the average lowest wages for each industry. The number of children receiving the average wages or more and the number receiving the average wages is shown in both tables.

The figures in the following table represent the final results as shown in the footings under the wage group in table II.

Average weekly wages, all industries	$2 69
Highest average weekly wages, all industries	3 38
Lowest average weekly wages, all industries	2 28
Number receiving average wage or more	1,466
Number receiving less than the average wage	1,894

Average weekly wages: For each establishment the average wage was, of course, obtained by dividing the total amount paid by the whole number of employed. For each industry the average was obtained by dividing the total sum of the averages of the establishments included by the whole number of the establishments. The average wage in each of the different industries investigated are presented in the following table:

AVERAGE WAGES PAID CHILDREN.

Industries.	Average wages weekly.
Agricultural implements	$3 50
Bicycles	3 22
Boots and shoes	2 26
Boxes, paper and wooden	2 71
Brick	2 86
Brooms, brushes and baskets	2 46
Chairs	2 35
Cigars and tobacco	2 53
Clothing	2 41
Confectionery, crackers, etc	1 96
Cotton and linen goods	3 07
Furniture	2 77
Iron goods, malleable	2 94
Knit goods	2 38
Lager beer, bottling	3 00
Lithographing	2 57
Lumber, lath and shingles	3 31
Mixed textiles	2 39
Office, etc., fixtures	2 75
Sash, doors and blinds	2 39
Sheet metal goods	2 41
Trunks and valises	2 53
Wagons, carriages and sleighs	3 06
Woolen and worsted goods	2 74
Miscellaneous	2 72
Average	$2 69

From this presentation we see that the average weekly wages paid in the 25 industries represented is $2.69. In thirteen of these the wages exceeded the average; in twelve, the wages paid was below the average. The highest average wages was paid in agricultural implements, or $3.50 per week. Other industries in which the wages was three dollars or over per week are: Lumber, lath and shingles, bicycles, cotton and linen mills, wagons, carriages and sleighs, breweries. The lowest wage of $1.96 per week was found in confectionery and cracker factories. Eight industries paid less than $2.50, and nineteen less than $3.00 per week.

The highest and lowest average weekly wages: The highest average weekly wages for all industries is $3.38 and the lowest $2.28. There was thus a difference between the highest and lowest wages of $1.10. The difference between the different industries is also great. On the whole, however, the range in this case is about the same as in the column for the average wages. Thus the industries showing the highest average also show, as a rule, the highest and lowest average. As an example of this we may take agricultural implements, and confectionary and crackers. The first of these show, as was explained, the highest average wages and it also shows the highest and lowest average wages. In the last, the average wages paid, was the lowest, and in this industry the highest and lowest average wages was also below that of any other industry. The figures for the other industries show the same relative position.

The number of children in each case who received the average weekly wage or more and less than the average wage is also shown. From this group we find first, that, of the 3,360 children included, 1,466, or 43.63 per cent. received $2.69 or more per week; and secondly, that 1,894 children, or 56.37 per cent., received less than $2.69 per week. It thus appears that the number receiving less than the average wages is much the larger. The immediate reason for this may be found in the fact that in this case the variations in wages were much more narrow; there being a difference of only 41 cents between the lowest average and the average wage, while the difference between the highest average and the average wage is 69 cents.

Classified as to industries we find, that in four of these, the number paid above the average is the highest; that in 20 industries the number receiving less than the average wage is the highest; while in one industry, wagons, carriages and sleighs, the number is equal.

School attendance: Regarding school attendance the original tables show for the establishments and industries included, the number of children in each case attending the different schools, the average, the highest and lowest average period of years of attendance, the number of children whose attendance covered the average period or over, and the number of those whose schooling was less than the average period.

The aggregate results in these tabulations are given in the following table:

SCHOOL ATTENDANCE.

Schools.	Number attending schools.	Years.			Number attending average period or over.	Number attending less than average period.
		Average period of attendance.	Highest average period of attendance.	Lowest average period of attendance		
Public schools only	1,034	6.5	7.8	5.3	600	434
Parochial schools only	1,933	6.1	7.3	4.8	1,078	855
Both public and parochial schools	384	Pu. 3. Pa. 3.3	....	....	....	....

Number who had not attended any school, 9.

As to the kind of school attended this table shows that 1,034 children, or 30.77 per cent. of the aggregate investigated had attended public schools exclusively; that 1,933 children, or 57.52 per cent. had attended parochial schools exclusively; and that 384, or 11.42 per cent. had attended both of these schools.

The number of children who had not attended any school was 9. Of these 4 did not know how to write their own name to the certificate.

The average period of school attendance was 6.5 years for those who had attended public schools and 6.1 for parochial schools. The average period for the public schools was therefore four-tenths of one year longer than the period for parochial schools. Of the children who had gone to both schools, the average period was 3 years for the public and 3.3 years, or three-tenths of a year longer, for the parochial.

The highest average period was 7.8 years for those who had attended public schools only, and 7.3 years for those who had attended parochial schools only. The difference here in favor of public schools is about one-half of one year.

The figures for the lowest period of attendance show about the same relation: For public schools the lowest average was 5.3 years; for parochial schools 4.8 years.

Of the 1,034 children who had attended the public schools only, 600, or about 58 per cent. had completed the average school period, while 434, or about 42 per cent. had attended less than the average period.

Of the 1,933 children who had gone to parochials only, 1,078, or nearly 56 per cent. had completed the average period, while 855, or about 44 per cent. had atended less than this period.

Place of birth: The final result of the data relating to the place of birth of the children included, as obtained and presented in the foregoing tables, is as follows:

Place of birth.	Number.	Per cent.
In Wisconsin	2,618	77.92
In Other States	150	4.46
In Germany	592	17.62
Aggregate	3,360	100.

In this classification as to their place of birth we find that 2,618 children, or 77.92 per cent., were born in Wisconsin; that 150, or 4.46 per cent., were born in other states; and 592, or 17.62 per cent., were born in Germany. Regarding the figures in the last item, or those born in Germany, it must be said that they are not strictly correct. Judging from the names and other circumstances there were good reasons for believing that many of the children who gave Germany as their place of birth were in reality born in Poland and Bohemia.

Where living: The following table shows where or with whom the children were living:

Where living.	Number.	Per cent.
With one or both parents	3,313	98.60
With other relatives	43	1.28
Boarding	4	.12
Aggregate	3,360	100.

According to this, 3,313, or 98.60 per cent. of the children, were living with either one or both parents; 43, or 1.28 per cent., were living with other relatives, and 4, or .12 per cent. of the children, were boarding. It would have been interesting to know the circumstances which compelled the children to live elsewhere than with their parents. Owing to the circumstances, however, under which this data was obtained, the additional inquiries necessary for this purpose would have caused some inconvenience or required extra time, and was therefore not attempted.

Occupation of father: Inquiries as to the occupation of the father were made in every case. As the tables show the answers to these were tabulated in connection with the other data collected. To give the occupations as reported, in detail would have required more space than could be alloted for this purpose. In all cases, however, the occupation given was of such a nature as to come, broadly speaking, under one or the other of the terms "Common Labor" and "Trade." This classification was therefore adopted. As thus classified 2,466 reports, or 73. 39 per cent. of the aggregate, come under the first term or "Common Labor," while 894, or 26.61 per cent., come under "Trade."

In addition to the facts required by the schedule, children which appeared very young or small, whether found to be under 14 years of age or not, were questioned concerning the conditions in their homes. The purpose of this was if possible to obtain some fact or facts that somehow might throw some additional light on the causes in operation which compelled these children to become wage-earners at so early an age. Our efforts in this respect, however, did not meet with the desired success. The reasons for this are several. In the first place the inquiries necessary were not included in the schedule and hence difficult to carry out. Then again it was found that in order to accomplish anything, more ground would have had to be covered than the Bureau was prepared for. While thus not a success as a whole, many facts were gathered that proved interesting. Among these a few, such as those which related to whether or not the father was working and whether the family owned the house or home in which they lived deserve to be included here.

As to whether the father was working, 1,219, or 36.28 per cent. of the children, were questioned. The answers brought out the facts that in 510 cases, or 46.40 per cent. of the number questioned in this regard, the father was at work; that in 233 cases, or 21.20 per cent., the father was dead; and that in 356 cases, or 32.40 per cent., the father was not at work. The reason for such idleness was, when living, usually attributed to sickness or inability to find work.

As to the ownership of their home 1,099 children were questioned. Of these 769, or 63.08 per cent., stated that the house or property where they lived was owned by the father or by the family, and 450, or 36.92 per cent., said the family rented their home. The amount paid as rent was also inquired about and from their answers it was found that the average monthly rate was $4.50. The most noticeable feature about the above answers is the large percentage who owned their homes.

In this part or under "Special Inspection" among other facts has been shown the aggregate persons employed and number or proportion of same who were 16 years of age or under for the various establishments included in this inspection. In the "General Inspection" is shown for the establishments included there the aggregate persons employed and number or proportion of these who were 18 years or under. The former, or the "Special Inspection," was conducted during the first half of this year 1898. This inspection embraced 215 establishments. The latter, or the "General Inspection," was begun in the early part of 1897 or just one year previous. This inspection embraced practically all factories in the state including those inspected at the special inspection. The 215 establishments referred to are therefore covered by both inspections. As the data relating to the number of persons employed in these establishments is also alike or similar in the two cases a comparison of the results of the two inspections will be found interesting. Such a comparison is therefore presented in the following table:

COMPARISONS OF PERSONS EMPLOYED IN 215 ESTABLISHMENTS IN 1897 AND 1898.

Industries.	No of establishments	No. of Wage Earners Special Insp., 1898.			No. of Wage Earners Gen. Insp., 1897.		
		Aggregate date of inspection.	Number 16 years of age or under.	Percentage 16 years of age or under.	Aggregate date of inspection.	No. 18 years of age or under.	Percentage 18 years of age or under.
Agricultural implements	5	1,213	23	1.89	1,259	84	6.67
Bicycles	7	821	49	5.96	956	75	7.85
Boots and shoes.............	7	1,098	97	8.83	1,289	337	26.14
Boxes, wooden and paper....	12	1,014	171	16.86	1,071	301	30.00
Brick	4	232	17	7.32	206	33	11.16
Brooms, brushes and baskets	4	97	18	18.57	109	31	28.22
Chairs	11	2,969	202	6.80	2,680	444	16.56
Cigars and tobacco..........	9	441	48	10.88	490	148	30.20
Clothing	6	606	47	7.75	614	120	19.58
Confectionery, crackers, etc.	9	744	152	20.44	543	225	41.44
Cotton and linen mills........	3	512	35	6.83	501	91	18.14
Furniture	12	1,655	116	7.01	1,618	184	11.37
Iron goods	12	2,302	180	7.82	1,533	283	18.46
Knit goods	10	2,063	502	24.33	1,895	778	41.05
Lager beer	7	2,509	135	5.38	2,481	324	13.06
Lithographing	5	303	39	12.87	331	76	23.00
Lumber, lath and shingles..	5	734	100	13.62	749	130	17.37
Mixed textiles	4	377	154	40.85	309	152	49.19
Office and saloon fixtures....	5	515	25	4.85	455	42	9.23
Sash, doors and blinds......	13	2,787	229	8.21	2,334	414	17.70
Sheet metal goods............	7	1,732	343	19.80	1,585	732	46.20
Trunks and valises............	6	1,085	100	9.21	957	204	21.32
Wagons, carriages & sleighs	7	1,685	28	1.66	1,392	76	5.46
Woolen and worsted mills..	6	597	49	8.21	590	133	22.54
Miscellaneous	39	5,714	501	8.76	5,052	1,037	20.52
Aggregates and percentages	215	33,805	3,360	9.90	30,999	6,454	20.82

As said the above table covers 215 establishments. These establishments were inspected at both inspections and, if "Miscellaneous" is considered as one industry, it represents 25 industries.

The above table reveals some interesting facts. At the first inspection, or that of 1897, 30,999 persons were employed. At the last, or special inspection, 33,805 persons were employed by the same establishments. Comparing these aggregates we find an increase, in the latter year, in the number of persons employed of 2,806 persons or practically 10 per cent. This increase, however, is not shared in by all industries. A study of the table will show that 15 industries only show an increase, and that 10 show a decrease. The increase in the former case, however, is considerable, amounting in all to 3,321 persons, while in the latter case the decrease foots up to 515 persons only. The changes as between the different industries are too apparent to need further explanations.

As to the number of children employed we find that of the 30,999 persons employed at the "General Inspection" in 1897, 6,454, or 20.82 per cent., were 18 years of age or under; and that of the 33,805 persons employed at time of the "Special Inspection" in 1898, or one year later, 3,360, or 9.90 per cent., were 16 years of age or under. As the age limit at the first inspection was placed at 18 and in the latter at 16 years, these figures do not indicate either an increase or a decrease in child labor. The relative proportion, however, of child labor is shown. As the establishments included are representative, the proportion shown represents the condition in this respect in our manufacturing centers for the industries covered.

STATISTICS OF MANUFACTURES.

This presentation of statistics of manufactures for this state is a deviation from any method formerly employed. In the last biennial report of this Bureau our object was to show the cost of production in the several classified industries in the state, and for that reason the result of the investigation was almost wholly expressed in percentages, for reasons then explained. In the present report we aim to show the conditions of the different industries by the totals of the several statistical inquiries for the years of 1896 and 1897, and by this method afford ample comparison between the two years along each line of inquiry.

The data for this investigation covers two years, 1896 and 1897, and was obtained from manufacturers on schedules prepared for the purpose. It is only fair to state, that manufacturers, as a rule, now see the import of the work of the Bureau and a more cheerful compliance with its requests are made. This is particularly true for the last year, as the schedules or returns were in most cases filled out complete; some, of course, would have to be written to several times before all the facts sought could be obtained.

This form of investigation is now carried on by several states in the Union, for the purpose of facilitating comparisons of conditions along industrial lines. The many and important manufacturing interests of this state demand that the investigations be as full and comprehensive as possible, that the system of investigation be continued for some time along certain lines rather than on detached or special lines, so that the results when incorporated into a report, would be of obvious value. The Bureau of the state of Massachusetts, the oldest in the country, and perhaps the best equipped of any bureau of its kind for effective work, has conducted similar investigations for many years with very satisfactory results. We have therefore to a great extent conformed to the method of said bureau, both as to form of tables and arrangement of facts gathered, believing that the best results to the state could be obtained thereby. At the same time it is acting in harmony with the sentiments of other states, which are conducting investigations along this same line.

It is hoped that it will be found practicable to continue this feature of investigation for succeeding reports, as its value, both to the manufacturers and working men, must be apparent.

The several results shown in this report are built upon the data from identical establishments making returns both in 1896 and 1897, and permits of direct comparisons on the same basis for both years.

Establishments which made returns for the first time in 1897, and some which reported for 1896, but for some valid reason failed to report for 1897, are, of course, not included for consideration in this report.

The statistics contained herein include complete reports from 1,245 establishments, classified into 48 industries. This number is increased to 1,499 establishments, when we include those making returns as to wages, yearly earnings, number of persons employed, and time in operation, and brings the number of industries to 58.

The statistical presentations show by industries the number of private firms and corporations, the number of partners and stockholders, amount of capital invested, stock and material used, goods made and work done, the number of persons employed, total amount paid in wages and yearly earnings, proportion of business done and time in operation.

Relating to the question of private firms and corporations, it can be said that the Bureau has been very fortunte in getting quite complete answers, as only twelve establishments failed to designate. The explanation for this failure to designate is found in the fact that the manager of establishments belonging in whole or in part to foreign or non-resident owners, does not know the number of stockholders in the concern, and as a rule, he finds it difficult to obtain the information.

By the term "Capital invested" is meant here all the capital devoted for the purposes of production, and is made up of the following principal items: Value of land, buildings, and fixtures; value of machinery, tools and implements, value of raw material at end of fiscal year of establishment, cash and credit capital, etc.

By "Stock and Materials Used" is meant all the materials used or consumed in manufacturing the product of the establishment, and includes all kinds of supplies such as fuel, boxes, barrels, light, etc.

The "Value of Goods" made or work done, or the product of the industry, embodies all the expenses incurred in producing it, leaving it in a condition ready for the consumer.

The tables containing the information gives the value of goods made or work done by industries, and when the total product or value of goods made is referred to, it is meant the product of the 1,245 establishments making returns for the years 1896 and 1897.

The number of persons employed is shown by industries, giving in separate tables the average number, the smallest and the greatest number, together with the excess of greatest over smallest number.

Employment in each separate industry of the aggregate number of males and females in each month for the two years is also shown.

The tables relating to wages are found in three parts. The first presentation gives the total amount paid in wages by industries for 1896 and 1897; the second, the average yearly earnings, which are obtained by dividing the total amount of wages by the sum representing the average number of persons employed regardless of sex or age. This being simply a pro rata division of the total amount paid in wages among the total number of employes, an increase or decrease in which does not of itself signify a corresponding change in the *rate* of daily wages paid. An increase or decrease in the average yearly earnings is more attributable to the loss of time or an increased number of low-priced help, than to anything else.

The third part relates to classified weekly wages. A table of wage rates is given, ranging from $25.00 per week, and over, down to $1.50 per week or less. The employes, divided into four classes,—males and females, 18 years and over, and males and females under 18 years of age,—are entered in their respective place according to the rate of wage received.

In proportion of business done, the greatest productive capacity of the establishment with present facilities is considered 100 per cent. If an establishment turned out goods equal to three-fourths of its maximum capacity, the proportion of business done would be considered as 75 per cent., and if the output reached only one-half, the proportion would be 50 per cent. The last table relates to days in operation of each industry, and an average for All Industries.

Whenever "All Industries," or any totals represented by said term, are referred to in this report, it should be understood to mean the total number of industries or any total amount represented by said number of industries which are found at end of each table.

As the establishments furnishing the data for these totals have made returns for each of the two years, they enable a fair comparison to be made between 1896 and 1897 that could not have been obtained in any other way.

This report is divided into three parts: first, the statistical tables by industries, arranged according to the heads already referred to. The second contains a detailed industry presentation or a grouping of facts for twelve leading industries, arranged for convenience and comparison, one presentation of the twelve industries consolidated and a similar one for all industries.

The third part is an analysis or retrospect over all the tables.

PRIVATE FIRMS AND CORPORATIONS: PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1896.

In the followng table, the number of private firms and corporations in each industry, together with the number of partners and stockholders by sex, is given:

INDUSTRIES.	Number of establishments.	Number of private firms.	NUMBER OF PARTNERS.			Number of corporations.	NUMBER OF STOCKHOLDERS.			Ag. partners and stockholders.
			Male.	Female.	Total.		Male.	Female.	Total.	
Agricultural Implements	31	7	11	....	11	24	170	30	200	211
Artisans' tools and hardware specialties	10	7	14	....	14	3	11	....	11	25
Bicycles, Tricycles, etc	7	2	3	....	3	5	29	1	30	33
Boots and Shoes	24	10	18	....	18	14	108	7	115	133
Boxes (wooden and paper)	29	17	35	14	49	12	41	7	48	97
Brick, Tile and Sewer Pipes	23	14	24	....	24	9	65	16	81	105
Brooms, Brushes and Baskets	19	15	17	1	18	4	16	2	18	36
Burial Cases, Caskets, Coffins etc	4	2	8	....	8	2	14	....	14	22
[1] Cement, Lime, Plaster etc	12	3	4	....	4	8	208	20	228	232
Chairs	13	....	....	....	....	13	157	22	179	179
Cigars, Snuff and Tobacco	54	51	63	....	63	3	21	....	21	84
Clothing	25	10	17	....	17	15	126	21	147	164
[2] Confectioneries, Crackers, etc	12	2	4	....	4	7	23	3	26	30
Cooking and Heating Apparatus	24	15	45	....	45	9	73	4	77	122
Cooperage	21	12	16	....	16	9	108	2	110	126
Cotton and Linen Goods	5	2	4	....	4	3	167	21	188	192
Electrical and Gas Apparatus and Supp	21	8	16	....	16	13	88	14	102	118
Flour and Feed	86	58	83	2	85	28	293	50	343	428
Food Preparations	31	14	43	1	44	17	77	3	80	124
Furniture	42	11	22	....	22	31	370	31	401	423
Furs, Gloves and Mittens	11	8	15	2	17	3	13	....	13	30
[3] Iron Goods (Malleable)	25	7	15	....	15	17	130	4	134	149
Knit Goods	15	5	9	....	9	10	59	8	67	76
Lager Beer	71	40	85	3	88	31	347	40	387	475
Leather	33	19	34	....	34	14	1464	267	1731	1765
[4] Lumber, Lath and Shingles	168	67	96	....	96	100	453	88	541	637
Malt	20	6	13	....	13	14	123	11	134	147
[5] Machines and machinery	86	45	73	....	73	39	197	25	222	295
Office and Saloon Fixtures, etc	15	11	18	....	18	4	293	5	298	316
Paints, Oils and Crude Chemicals	7	2	3	....	3	5	19	....	19	22
[6] Paper and Pulp	34	4	5	....	5	27	180	4	184	189
Printers' Supplies	4	....	....	....	....	4	15	1	16	16
Saddlery, Harness, etc	9	5	8	....	8	4	15	....	15	22
Sash, Doors, Blinds, etc	73	44	92	....	92	29	161	17	178	270
Sheet Metal Goods	26	18	28	....	28	8	54	5	59	87
[7] Ship and Boat Building	6	2	3	....	3	3	36	....	36	39
Soap, Lye, Potash, etc	9	6	9	1	10	3	38	2	40	50
Staves and Heading	21	13	25	....	25	8	43	....	43	68
Stone (Granite, Marble, etc.)	10	7	12	....	12	3	25	....	25	37
Straw Goods	5	1	1	....	1	4	25	2	27	28
Toys and Games	5	1	2	....	2	4	47	1	48	50
Trunks, Valises, etc	9	1	2	....	2	8	68	1	69	71
Veneer	9	2	3	....	3	7	71	4	75	78
Wagons, Carriages and Sleighs	53	35	91	3	94	18	256	36	292	386
Woodenware	11	5	8	....	8	6	33	1	34	42
Woolen and Worsted Goods	11	5	7	3	10	12	87	21	108	118
All industries	1245	619	1104	30	1134	614	6417	797	7214	8348

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[1] One establishment no partners or stockholders reported.
[2] Three establishments no partners or stockholders reported.
[3] One establishment no partners or stockholders reported.
[4] One establishment no partners or stockholders reported.
[5] Two establishments no partners or stockholders reported.
[6] Three establishments no partners or stockholders reported.
[7] One establishment no partners or stockholders reported.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1897.

In the following table, the number of private firms and corporations in each industry, together with the number of partners and stockholders by sex, is given:

Industries.	Number of establishments.	Number of private firms.	Number of Partners.			Number of corporations.	Number of Stockholders.			Ag. partners and stockholders.
			Male.	Female.	Total.		Male.	Female.	Total.	
Agricultural Implements	31	8	19	....	19	23	201	35	236	255
Artisans' Tools & Hardware Specialties	10	8	15	....	15	2	7	....	7	22
Bicycles, Tricycles, etc	7	2	3	....	3	5	28	1	29	32
Boots and Shoes	24	9	15	....	15	15	151	17	168	183
Boxes (wooden and paper)	29	17	37	14	51	12	45	8	53	104
Brick, Tile and Sewer Pipe	23	14	38	....	38	9	66	20	86	124
Brooms, Brushes and Baskets	19	14	21	....	21	5	39	6	45	66
Burial Cases, Caskets, Coffins, etc	4	2	8	....	8	2	18	....	18	26
[1] Cement, Lime, Plaster, etc	12	3	4	....	4	8	201	33	234	238
Chairs	13	1	1	1	2	12	167	30	197	199
Cigars, Snuff and Tobacco	54	51	65	....	65	3	17	....	17	82
Clothing	25	15	64	22	86	10	52	25	77	163
[2] Confectionery, Crackers, etc	12	2	3	....	3	7	25	3	28	31
Cooking and Heating Apparatus	24	15	30	1	31	9	83	4	87	118
Cooperage	21	12	14	....	14	9	116	3	119	133
Cotton and Linen Goods	5	2	4	....	4	3	169	23	192	196
Electrical & Gas Apparatus & Supplies	21	8	15	....	15	13	118	15	133	148
Flour and Feed	86	55	112	5	117	31	405	72	477	594
Food Preparations	31	17	53	1	54	14	62	5	67	121
Furniture	42	11	19	....	19	31	418	33	451	470
Furs, Gloves and Mittens	11	8	16	2	18	3	12	....	12	30
[3] Iron Goods (Malleable)	25	7	14	....	14	17	148	5	153	167
Knit Goods	15	6	12	1	13	9	60	10	70	83
Lager Beer	71	40	57	3	60	31	397	49	446	506
Leather	33	19	79	....	79	14	1460	284	1744	1823
[4] Lumber, Lath and Shingles	168	66	103	2	105	101	548	84	632	737
Malt	20	6	14	....	14	14	123	11	134	148
[5] Machines and Machinery	56	45	73	1	74	39	227	27	254	328
Office and Saloon Fixtures, etc	15	10	27	....	27	5	312	5	317	344
Paints, Oils and Crude Chemicals	7	2	4	....	4	5	18	1	19	23
[6] Paper and Pulp	34	3	3	....	3	28	156	18	174	177
Printers' Supplies	4	....	....	....	....	4	17	1	18	18
Saddlery, Harness, etc	9	5	8	....	8	4	17	2	19	27
Sash, Doors, Blinds, etc	73	43	91	....	91	30	163	18	181	272
Sheet Metal Goods	26	19	34	....	34	7	46	7	53	87
[7] Ship and Boat Building	6	2	3	....	3	3	31	7	38	41
Soap, Lye, Potash, etc	9	6	9	2	11	3	39	3	42	53
Staves and Heading	21	12	26	....	26	9	50	1	51	77
Stone, (Granite, Marble, etc.)	10	7	11	1	12	3	23	....	23	35
Straw Goods	5	1	1	....	1	4	25	2	27	[illegible]
Toys and Games	5	1	2	....	2	4	42	1	43	45
Trunks, Valises, etc	9	2	4	....	4	7	58	9	67	71
Veneer	9	2	2	....	2	7	47	4	51	53
Wagons, Carriages and Sleighs	53	36	112	4	116	17	250	38	288	404
Woodenware	11	6	10	....	10	5	25	4	29	39
Woolen and Worsted Goods	17	5	7	3	10	12	87	23	110	120
All industries	1245	625	1262	63	1325	608	6769	947	7716	9041

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[1] One establishment no partners or stockholders reported.
[2] Three establishments no partners or stockholders reported.
[3] One establishment no partners or stockholders reported.
[4] One establishment no partners or stockholders reported.
[5] Two establishments no partners or stockholders reported.
[6] Three establishments no partners or stockholders reported.
[7] One establishment no partners or stockholders reported.

CAPITAL INVESTED—BY INDUSTRIES.

1896 AND 1897.

The capital invested by 1,245 establishments is represented in the following table. Comparison is made between the two years, and the relative increase or decrease is noted by amount and percentages.

INDUSTRIES.	No. of establishments.	AMOUNT OF CAPITAL INVESTED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amounts.	Per cent.
Agricultural implements	31	$6,247,280	$7,826,158	+ $1,578,878	+ 25.27
Artisans' tools and hardware specialties	10	575,979	585,053	+ 9,074	+ 1.57
Bicycles, tricycles, etc	7	715,272	960,049	+ 244,777	+ 31.42
Boots and shoes	24	1,955,624	1,900,423	— 55,201	— 2.90
Boxes (wooden and paper)	29	1,156,913	1,480,139	+ 323,226	+ 27.93
Brick, tiles and sewer pipe	23	927,437	903,110	— 24,327	— 2.62
Brooms, brushes and baskets	19	212,499	193,093	+ 19,406	+ 9.18
Burial cases, caskets, coffins, etc	4	266,500	349,500	+ 83,000	+ 31.14
Cement, lime, plaster, etc	12	986,215	1,046,205	+ 59,990	+ 6.08
Chairs	13	3,470,281	3,835,742	+ 365,461	+ 10.53
Cigars, snuff and tobacco	54	1,314,237	1,616,419	+ 302,182	+ 22.99
Clothing	25	1,676,936	1,719,252	+ 42,316	+ 2.52
Confectioneries, crackers, etc	12	624,741	671,742	+ 47,001	+ 7.52
Cooking and heating apparatus	24	1,375,296	1,737,501	— 362,205	—26.33
Cooperage	21	526,788	530,250	+ 3,462	+ 0.57
Cotton and linen goods	5	617,171	668,349	+ 51,178	+ 8.29
Electrical and gas apparatus and supplies	21	1,713,612	2,086,608	+ 372,996	+ 21.70
Flour and feed	86	6,449,116	7,411,133	+ 962,017	+ 14.91
Food preparations	31	4,117,091	4,751,285	+ 634,194	+ 15.40
Furniture	42	3,045,192	2,776,295	— 268,897	— 8.83
Furs, gloves and mittens	11	286,323	351,395	+ 65,072	+ 22.73
Iron goods (malleable)	25	4,223,641	4,427,480	+ 203,839	+ 4.82
Knit goods	15	1,440,606	1,756,464	+ 315,858	+ 21.92
Lager beer	71	33,943,545	35,539,091	+ 1,595,546	+ 4.66
Leather	33	10,394,318	12,124,012	+ 1,729,694	+ 16.64
Lumber, lath and shingles	168	44,989,633	45,642,002	+ 652,369	+ 1.45
Malt	20	4,318,614	5,028,607	+ 709,993	+ 16.44
Machines and machinery	86	8,244,923	9,038,030	+ 793,107	+ 8.77
Office and saloon fixtures, etc	15	903,420	816,966	— 86,454	— 9.56
Paints, oils and crude chemicals	7	699,000	922,750	+ 223,750	+ 32.15
Paper and pulp	34	8,224,977	9,014,723	+ 789,746	+ 9.60
Printers' supplies	4	213,934	264,355	+ 50,421	+ 23.56
Saddlery, harness, etc	9	196,468	202,989	+ 6,521	+ 3.31
Sash, doors, blinds, etc	73	5,504,932	5,541,357	+ 36,425	+ 0.66
Sheet metal goods	26	2,732,280	2,673,622	— 58,658	— 2.14
Ship and boat building	6	1,494,344	1,495,259	+ 915	+ 0.06
Soap, lye, potash, etc	9	509,000	521,289	+ 12,289	+ 2.41
Staves and heading	21	333,249	425,741	+ 92,492	+ 27.75
Stone (granite, marble, etc.)	10	316,826	224,876	— 91,950	—29.02
Straw goods	5	626,915	704,900	+ 77,985	+ 12.23
Toys and games	5	303,068	337,624	+ 34,556	+ 11.40
Trunks, valises, etc	9	807,589	834,179	+ 26,590	+ 3.29
Veneer	9	232,837	305,224	+ 72,387	+ 31.08
Wagons, carriages and sleighs	53	4,258,192	5,288,915	+ 1,030,723	+ 24.20
Woodenware	11	989,836	1,030,234	+ 40,398	+ 4.08
Woolen and worsted goods	17	1,752,474	2,200,279	+ 447,805	+ 25.90
All industries.	1245	$175,905,124	$189,760,669	+ $13,855,545	+ 7.87

STOCK OR MATERIAL USED—BY INDUSTRIES.

1896 AND 1897.

The figures given in the table below for stock or material used, represent the amount reported by 1,245 establishments for both years. Comparison is made between the two years, and the relative increase or decrease is noted by amount and percentages.

INDUSTRIES.	No. of establishments.	VALUE OF STOCK OR MATERIAL USED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amounts.	Per cent.
Agricultural implements	31	$2,268,950	$2,174,798	— $94,152	— 4.15
Artisans' tools and hardware specialties	10	267,855	237,492	— 30,363	—11.33
Bicycles, tricycles, etc	7	776,793	910,253	+ 133,460	+ 17.18
Boots and shoe	24	1,742,081	1,983,766	+ 241,685	+ 11.84
Boxes (wooden and paper)	29	898,500	1,030,849	+ 132,349	+ 14.72
Brick, tiles and sewer pipe	23	69,573	66,990	— 2,583	— 3.71
Brooms, brushes and baskets	19	74,303	73,355	— 948	— 1.27
Burial cases, caskets, coffins, etc	4	222,156	284,192	+ 62,036	+ 27.92
Cement, lime, plaster, etc	12	308,188	277,809	— 30,379	— 9.85
Chairs	13	1,007,428	1,077,342	+ 69,914	+ 6.94
Cigars, snuff and tobacco	54	1,265,515	1,324,851	+ 59,336	+ 4.69
Clothing	25	1,422,387	1,593,826	+ 171,439	+ 12.05
Confectioneries, crackers, etc	12	813,548	981,630	+ 168,082	+ 20.65
Cooking and heating apparatus	24	476,672	543,257	+ 66,585	+ 13.92
Cooperage	21	441,433	346,976	— 94,457	—21.39
Cotton and linen goods	5	265,271	320,070	+ 54,799	+ 20.66
Electrical and gas apparatus and supplies	21	829,599	870,782	+ 41,183	+ 4.95
Flour and feed	86	15,889,410	18,724,577	+ 2,835,167	+ 17.84
Food preparations	31	10,173,349	11,338,905	+ 1,165,556	+ 11.45
Furniture	42	1,448,760	1,333,503	— 115,257	— 7.95
Furs, gloves and mittens	11	429,302	309,404	— 119,898	—27.93
Iron goods (malleable)	25	2,753,694	3,010,246	+ 256,552	+ 9.31
Knit goods	15	626,073	792,277	+ 166,204	+ 26.54
Lager beer	71	3,270,795	3,702,671	+ 431,876	+ 13.20
Leather	33	9,789,314	11,320,816	+ 1,531,502	+ 15,64
Lumber, lath and shingles	168	9,861,062	12,187,522	+ 2,326,460	+ 23.59
Malt	20	2,376,625	2,451,507	— 54,882	— 2.39
Machines and machinery	86	3,059,369	3,333,014	+ 273,645	+ 8.94
Office and saloon fixtures, etc	15	285,487	261,905	— 23,582	— 8.29
Paints, oils and crude chemicals	7	880,618	926,568	+ 45,950	+ 5.21
Paper and pulp	34	3,392,882	3,481,577	+ 88,695	+ 2.61
Printers' supplies	4	87,081	90,968	+ 3,887	+ 4.46
Saddlery, harness, etc	9	149,628	236,897	+ 87,269	+ 58.32
Sash, doors, blinds, etc	73	2,680,742	2,879,007	+ 198,265	+ 7.39
Sheet metal goods	26	1,708,597	1,898,543	+ 189,946	+ 11.11
Ship and boat building	6	493,813	290,677	— 203,136	—41.13
Soap, lye, potash, etc	9	238,932	382,099	+ 143,167	+ 59.92
Staves and heading	21	186,678	230,193	+ 43,515	+ 23.31
Stone, (granite, marble, etc.)	10	111,395	113,895	+ 2,500	+ 2.24
Straw goods	5	330,751	360,168	+ 29,417	+ 8.89
Toys and games	5	94,323	97,381	+ 3,058	+ 3.24
Trunks, valises, etc	9	359,010	411,193	+ 52,183	+ 14.53
Veneer	9	102,124	137,248	+ 35,124	+ 34.39
Wagons, carriages and sleighs	53	1,522,409	2,116,750	+ 594,341	+ 39.03
Woodenware	11	922,041	767,692	— 154,349	—16.73
Woolen and worsted goods	17	652,750	844,629	+ 191,879	+ 29.70
All industries	1245	$87,027,266	$98,130,070	+ $11,102,804	+ 12.76

GOODS MADE AND WORK DONE—BY INDUSTRIES,

1896 AND 1897.

The figures given for value of goods made and work done, represent the value of goods made and work done in the 1,245 establishments reporting for both years. Comparison is madé between the two years and the relative increase or decrease is noted by amount and percentages.

Industries.	No. of establishments.	Value of Goods Made and Work Done.		Increase (+) or Decrease (—) in 1897.	
		1896.	1897.	Amounts.	Per cent.
Agricultural implements	31	$4,529,474	$4,242,134	— $287,340	— 6.22
Artisans' tools and hardware specialties	10	712,165	624,404	— 87,761	—12.32
Bicycles, tricycles, etc	7	1,340,014	1,509,852	+ 169,838	+ 12.67
Boots and shoes	24	3,018,633	3,416,422	+ 397,789	+ 13.17
Boxes (wooden and paper)	29	1,615,386	1,849,952	+ 234,566	+ 14.52
Brick, tiles and sewer pipe	23	235,040	225,824	— 9,216	— 3.92
Brooms, brushes and baskets	19	178,618	174,404	— 4,214	— 2.36
Burial cases, caskets, coffins, etc	4	447,913	559,898	+ 111,985	+ 25.00
Cement, lime, plaster, etc	12	683,834	603,310	— 80,524	—11.77
Chairs	13	2,299,371	2,494,412	+ 195,041	+ 8.48
Cigars, snuff and tobacco	54	2,085,317	2,206,005	+ 120,688	+ 5.78
Clothing	25	2,670,425	2,956,824	+ 286,399	+ 10.72
Confectioneries, crackers, etc	12	1,450,215	1,570,201	+ 119,986	+ 8.27
Cooking and heating apparatus	24	1,185,068	1,325,252	+ 140,184	+ 11.83
Cooperage	21	893,735	717,497	— 176,238	—19.71
Cotton and linen goods	5	472,278	546,324	+ 74,046	+ 15.67
Electrical and gas apparatus and supplies	21	2,162,352	2,156,197	— 6,155	— 0.28
Flour and feed	86	19,186,233	22,016,981	+ 2,830,748	+ 14.75
Food preparations	31	12,583,578	13,717,083	+ 1,133,505	+ 9.00
Furniture	42	3,036,842	2,776,577	— 260,265	— 8.57
Furs, gloves and mittens	11	750,019	528,438	— 221,572	—29.54
Iron goods (malleable)	25	6,183,803	6,342,249	+ 158,446	+ 2.56
Knit goods	15	1,330,961	1,654,638	+ 323,677	+ 24.31
Lager beer	71	15,394,071	16,945,217	+ 1,551,146	+ 10.07
Leather	33	13,445,346	15,153,361	+ 1,708,015	+ 12.70
Lumber, lath and shingles	168	18,322,764	22,043,162	+ 3,720,398	+ 20.30
Malt	20	3,578,934	3,681,990	+ 103,056	+ 2.87
Machines and machinery	86	7,662,023	8,155,581	+ 493,558	+ 6.44
Office and saloon fixtures, etc	15	753,398	687,727	+ 65,671	+ 8.71
Paints, oils and crude chemicals	7	1,247,149	1,315,557	+ 68,408	+ 5.48
Paper and pulp	34	6,592,166	6,555,806	— 36,360	— 0.55
Printers' supplies	4	222,555	230,469	+ 7,914	+ 3.55
Saddlery, harness, etc	9	276,188	414,175	+ 137,987	+ 49.96
Sash, doors, blinds, etc	73	5,002,045	5,260,706	+ 258,661	+ 5.17
Sheet metal goods	26	3,150,438	3,376,417	+ 225,989	+ 7.10
Ship and boat building	6	1,202,260	666,473	— 535,787	—44.57
Soap, lye, potash, etc	9	430,987	675,411	+ 244,424	+ 56.71
Staves and heading	21	418,398	524,414	+ 106,016	+ 25.33
Stone (granite, marble, etc.)	10	311,417	311,886	+ 469	+ 0.15
Straw goods	5	789,652	852,521	+ 62,869	+ 7.96
Toys and games	5	225,587	226,606	+ 1,019	+ 0.45
Trunks, valises, etc	9	758,118	848,396	+ 90,278	+ 11.90
Veneer	9	283,675	373,469	+ 89,794	+ 31.65
Wagons, carriages and sleighs	53	3,121,558	4,256,259	+ 1,134,701	+ 36.67
Woodenware	11	1,700,831	1,560,375	— 140,456	— 8.25
Woolen and worsted goods	17	1,212,072	1,613,817	+ 401,745	+ 33.14
All industries	1245	$155,152,906	$169,946,673	+ $14,793,767	+ 9.53

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED—BY INDUSTRIES.

The terms "Period of Employment of Smallest Number" and "Period of Employment of Greatest Number," as used in the following table, are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. Wage earners only are considered; officers, clerks or other salaried persons are not included.

AGGREGATES—1896

Industries.	No of establishments.	Aggregate average number of persons employed.	Aggregate of Persons Employed at Periods of Employment of—		Excess greatest over smallest number.
			Smallest number.	Greatest number.	
Agricultural implements	31	1,856	1,517	2,513	996
Artisans' tools and hardware specialties	10	359	232	477	245
Beverages (not spirituous, soft drinks)	18	186	136	247	111
Bicycles, tricycles, etc	7	677	309	971	662
Boots and shoes	24	2,239	2,012	2,435	423
Boxes (wooden and paper)	29	1,195	1,090	1,268	178
Brick, tile and sewer pipe	23	278	56	600	544
Brooms, brushes, etc	19	189	145	235	90
Burial cases, caskets, coffins, etc	4	300	297	314	17
Cement, lime, plaster, etc	12	296	183	435	252
Chairs	13	2,775	2,689	2,849	160
Chemical preparations	13	140	126	168	42
Cigars, snuff and tobacco	54	895	745	997	252
Clothing	25	1,736	1,610	1,866	256
Coal and wood	28	1,463	1,045	2,069	1,024
Confectioneries, crackers, etc	12	699	667	742	75
Cooking and heating apparatus	24	1,157	937	1,309	372
Cooperage	21	658	585	724	139
Cotton and linen goods	5	552	507	629	122
Electrical and gas apparatus and supplies	21	1,041	969	1,141	172
Electrical and gas lighting, power and	49	1,861	1,624	2,029	406
street railways	8	112	86	171	85
Fancy articles					
Flour and feed	86	1,095	1,025	1,144	119
Food preparations	31	1,981	1,525	3,887	2,362
Furniture	42	2,710	2,317	3,020	703
Furs, gloves and mittens	11	369	292	454	162
Grain and warehouse men	12	150	132	269	137
Iron goods (malleable)	25	3,315	3,069	3,654	585
Iron (pig)	2	116	85	191	106
Knit goods	15	1,605	1,414	1,716	302
Lager beer	71	3,133	3,032	3,244	212
Laundries	75	761	645	883	238
Leather	33	4,340	4,075	4,872	797
Lithographing and engraving	7	437	432	462	30
Lumber, lath and shingles	168	11,542	6,313	17,900	11,587
Malt	20	505	368	584	216
Machines and machinery	86	4,317	3,792	4,921	1,129
Mixed textiles	9	368	341	482	141
Office and saloon fixtures, etc	15	630	486	785	299
Paints, oils and crude chemicals	7	128	88	138	50
Paper and pulp	34	3,117	2,774	3,667	893
Printers' supplies	4	186	173	196	23
Railway equipment	20	5,246	4,895	6,500	1,605
Saddlery, harness, etc	9	159	131	201	70

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED—BY INDUSTRIES.

The terms "Period of Employment of Smallest Number" and "Period of Employment of Greatest Number," as used in the following table, are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. Wage earners only are considered; officers, clerks or other salaried persons are not included.

AGGREGATES—1897.

Industries.	No. of establishments.	Aggregate average number of persons employed.	Aggregate of Persons Employed at Periods of Employment of —		Excess greatest over smallest number.
			Smallest number.	Greatest number.	
Agricultural implements	31	1,866	1,568	2,386	818
Artisans' tools and hardware specialties	10	443	214	801	587
Beverages (not spirituous, soft drinks).	18	204	160	241	81
Bicycles, tricycles, etc	7	658	301	962	661
Boots and shoes	24	2,299	2,186	2,457	271
Boxes (wooden and paper)	29	1,336	1,180	1,554	374
Brick, tile and sewer pipe	23	280	56	632	576
Brooms, brushes, etc	19	207	153	288	135
Burial cases, caskets and coffins	4	313	306	331	25
Cement, lime, plaster, etc	12	328	193	553	360
Chairs	13	3,091	2,992	3,319	327
Chemical preparations	13	146	136	166	30
Cigars, snuff and tobacco	54	955	927	995	68
Clothing	25	1,620	1,572	1,798	226
Coal and wood	28	1,759	1,280	2,719	1,439
Confectioneries, crackers, etc	12	734	635	891	256
Cooking and heating apparatus	24	1,247	1,137	1,578	441
Cooperage	21	627	543	773	230
Cotton and linen goods	5	479	274	600	326
Electrical and gas apparatus and supplies	21	1,045	998	1,179	181
Electrical and gas lighting, power and street railways	49	1,932	1,764	2,207	443
Fancy articles	8	128	87	177	90
Flour and feed	86	1,132	1,108	1,205	97
Food preparations	31	2,118	1,517	4,317	2,800
Furniture	42	2,441	2,205	2,838	633
Furs, gloves and mittens	11	284	226	335	109
Grain and warehouse men	12	181	151	281	130
Iron goods (malleable)	25	3,350	2,594	4,084	1,490
Iron (pig)	2	144	89	220	131
Knit goods	15	1,751	1,366	1,953	587
Lager beer	71	3,108	2,984	3,352	368
Laundries	75	783	700	874	174
Leather	33	4,754	4,201	5,329	1,128
Lithographing and engraving	7	440	431	454	23
Lumber, lath and shingles	168	11,827	5,195	19,706	14,511
Malt	20	514	363	590	227
Machines and machinery	86	4,486	4,201	5,256	1,055
Mixed textiles	9	348	317	428	111
Office and saloon fixtures, etc	15	558	422	713	291
Paints, oils and crude chemicals	7	139	126	164	38
Paper and pulp	34	3,152	2,893	3,716	823
Printers supplies	4	190	187	199	12
Railway equipment	20	9,933	9,483	10,416	933
Saddlery, harness, etc	9	215	193	264	71

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED BY INDUSTRIES —Continued.

The terms "Period of Employment of Smallest Number" and "Period of Employment of Greatest Number," as used in the following table, are meant those times, *as regards aggregate number of persons employed*, when the smallest or greatest number, respectively, was employed. Wage earners only are considered; officers, clerks or other salaried persons are not included.

AGGREGATES, 1896.

INDUSTRIES.	No. of establishments.	Aggregate average number of persons employed.	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF—		Excess greatest over smallest number.
			Smallest number.	Greatest number.	
Sash, doors, blinds and mouldings	73	3,207	2,716	3,714	998
Sheet metal goods	26	1,561	1,467	1,982	515
Ship and boat building	6	960	385	1,566	1.181
Soap, lye, potash, etc	9	133	126	147	21
Staves and heading	21	442	316	665	349
Stone (granite, marble, etc.)	10	173	103	245	142
Straw goods	5	606	408	849	441
Toys and games	5	248	180	337	157
Trunks, valises, etc	9	587	478	659	181
Veneer	9	294	228	408	180
Wagons, carriages and sleighs	53	2,084	1,567	2,455	888
Woodenware	11	1,611	1,587	1,692	105
Woolen and worsted goods	17	883	658	1,054	396
Miscellaneous	13	388	379	414	35
All industries	1,499	80,051	65,569	99,546	33.977

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED BY INDUSTRIES—Continued.

The terms "Period of Employment of Smallest Number" and "Period of Employment of Greatest Number," as used in the following table, are meant those times, *as regards aggregate number of persons employed* when the smallest or greatest number, respectively, was employed. Wage earners only are considered; officers, clerks or other salaried persons are not included.

AGGREGATES, 1897.

INDUSTRIES.	No. of establishments.	Aggregate average number of persons employed.	AGGREGATES OF PERSONS EMPLOYED AT PERIODS OF EMPLOYMENT OF—		Excess greatest over smallest number.
			Smallest number.	Greatest number.	
Sash, doors, blinds and mouldings	78	3,507	2,788	4,015	1,227
Sheet metal goods	26	2,042	1 833	2,239	406
Ship building	6	622	310	939	629
Soap, lye and potash	9	165	152	181	29
Staves and heading	21	521	375	780	405
Stone, (granite, marble, etc.)	10	182	116	246	130
Straw goods	5	555	343	817	474
Toys and games	5	253	186	364	178
Trunks, valises, etc	9	635	514	710	196
Veneer	9	385	331	494	163
Wagons, carriages and sleighs	53	2,370	2,193	2,641	448
Woodenware	11	1,824	1,172	1,470	298
Woolen and worsted goods	17	1,048	907	1,223	316
Miscellaneous	13	380	373	419	46
All industries	1,499	87,534	71,207	109,839	38,632

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED—BY INDUSTRIES.

In this table averages for each establishment are given. These have been arrived at by dividing the aggregates given on page 564, by the number of establishments in each industry. Wage earners only are considered; officers, clerks and other salaried persons are not included.

AVERAGES, 1896.

Industries.	No. of establishments.	Number of Persons Employed in Each Establishment.			
		Average number.	Smallest number.	Greatest number.	Excess of greatest over Smallest.
Agricultural implements	31	60	49	81	32
Artisans' tools and hardware specialties	10	36	23	47	24
Beverages (not spirituous, soft drinks)	18	10	7	13	6
Bicycles, tricycles, etc	7	96	44	138	94
Boots and shoes	24	93	84	101	17
Boxes (wooden and paper)	29	41	37	43	6
Brick, tile and sewer pipe	23	12	2	26	24
Brooms and brushes, etc	19	9	7	12	5
Burial cases, caskets, coffins, etc	4	75	74	78	4
Cement, lime, plaster, etc	12	24	15	36	21
Chairs	13	213	206	219	13
Chemical preparations	13	10	9	13	4
Cigars, snuff and tobacco	54	16	13	18	5
Clothing	25	69	64	74	10
Coal and wood	28	52	37	73	36
Confectioneries, crackers, etc	12	58	55	61	6
Cooking and heating apparatus	24	48	39	54	15
Cooperage	21	31	28	34	6
Cotton and linen goods	5	110	101	126	25
Electrical and gas apparatus and supplies	21	50	46	54	8
Electrical and gas lighting, power and street railways	49	38	33	41	8
Fancy articles	8	14	10	21	11
Flour and feed	86	12	11	13	2
Food preparations	31	63	49	125	76
Furniture	42	64	55	72	17
Furs, gloves and mittens	11	33	26	41	15
Grain and warehouse men	12	12	11	22	11
Iron goods (malleable)	25	132	122	146	24
Iron (pig)	2	58	42	95	53
Knit goods	15	107	94	114	20
Lager beer	71	44	42	45	3
Laundries	75	10	8	11	3
Leather	33	131	123	147	24
Lithographing and engraving	7	60	60	66	6
Lumber, lath and shingles	168	68	37	106	69
Malt	20	25	18	29	11
Machines and machinery	86	50	44	57	13
Mixed textiles	9	40	37	53	16
Office and saloon fixtures, etc	15	42	32	52	20
Paints, oils and crude chemicals	7	18	12	19	7
Paper and pulp	34	91	81	108	27
Printers' supplies	4	46	43	48	5
Railway equipment	20	262	244	325	81
Saddlery, harness, etc	9	17	14	22	8

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED—BY INDUSTRIES.

In this table averages for each establishment are given. These have been arrived at by dividing the aggregates given on page 565, by the number of establishments in each industry. Wage earners only are considered; officers, clerks and other salaried persons are not included.

AVERAGES, 1897.

Industries.	No of establishments.	Number of Persons Employed in each Establishment.			
		Average number.	Smallest number.	Greatest number.	Excess of greatest over smallest.
Agricultural implements	31	60	50	77	27
Artisans' tools and hardware specialties	10	44	21	80	59
Beverages (not spirituous, soft drinks)	18	11	9	13	4
Bicycles, tricycles, etc	7	94	43	137	94
Boots and shoes	24	95	91	102	11
Boxes (wooden and paper)	29	45	40	53	13
Brick, tile and sewer pipe	23	12	2	27	25
Brooms, brushes, etc	19	10	8	15	7
Burial cases, caskets, coffins, etc	4	78	76	82	6
Cement, lime, plaster, etc	12	27	16	46	30
Chairs	13	237	230	254	24
Chemical preparations	13	11	10	12	2
Cigars, snuff and tobacco	54	17	17	18	1
Clothing	25	61	52	71	19
Coal and wood	28	62	45	97	52
Confectioneries, crackers etc	12	61	53	74	21
Cooking and heating apparatus	24	52	47	65	18
Cooperage	21	29	26	36	10
Cotton and linen goods	5	95	55	120	65
Electrical and gas apparatus and supplies	21	49	47	56	9
Electrical and gas lighting, power and street railway	49	39	36	45	9
Fancy articles	8	16	11	22	11
Flour and feed	86	13	12	14	2
Food preparations	31	68	48	139	91
Furniture	42	58	52	67	15
Furs, gloves and mittens	11	26	20	30	10
Grain and warehouse men	12	15	12	23	11
Iron goods (malleable)	25	134	103	163	60
Iron (pig)	2	72	44	110	66
Knit goods	15	116	91	130	39
Lager beer	71	43	42	47	5
Laundries	75	10	9	11	2
Leather	33	144	127	161	34
Lithographing and engraving	7	62	61	64	3
Lumber, lath and shingles	168	70	31	117	86
Malt	20	25	18	29	11
Machines and machinery	86	52	48	61	13
Mixed textiles	9	38	35	47	12
Office and saloon fixtures, etc	15	37	28	47	19
Paints, oils and crude chemicals	7	19	18	23	5
Paper and pulp	34	92	85	109	24
Printers' supplies	4	47	46	49	3
Railway equipment	20	496	474	520	46
Saddlery, harness, etc	9	24	20	29	9

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED BY BY INDUSTRIES—Continued.

In this table averages for each establishment are given. These have been arrived at by dividing the aggregates given on page 566, by the number of establishments in each industry. Wage earners only are considered; officers, clerks and other salaried persons are not included.

AVERAGES, 1896.

Industries	No. of establishments.	Number of Persons Employed in Each Establishment.			
		Average number.	Smallest number	Greatest number.	Excess of greatest over smallest.
Sash, doors, blinds and mouldings	73	44	37	50	13
Sheet metal goods	26	60	56	76	20
Ship and boat building	6	160	64	260	196
Soap, lye, potash, etc	9	14	14	16	2
Staves and heading	21	21	15	32	17
Stone, (granite, marble, etc.)	10	17	10	24	14
Straw goods	5	121	81	169	88
Toys and games	5	49	36	67	31
Trunks, valises, etc	9	65	53	73	20
Veneer	9	32	25	45	20
Wagons, carriages and sleighs	53	39	29	46	17
Woodenware	11	146	144	153	9
Woolen and worsted goods	17	52	38	62	24
Miscellaneous	13	29	29	32	3
All industries	1,499	53	44	66	22

SMALLEST, GREATEST AND AVERAGE NUMBER OF PERSONS EMPLOYED—BY INDUSTRIES—Continued.

In this table averages for each establishment are given. These have been arrived at by dividing the aggregates given on page 567, by the number of establishments in each industry. Wage earners only are considered: officers, clerks and other salaried persons are not included.

AVERAGES—1997.

INDUSTRIES.	No. of establishments.	Number of Persons Employed in Each Establishment.			
		Average number.	Smallest number.	Greatest number.	Excess of greatest over smallest.
Sash, doors, blinds and mouldings	73	48	38	55	17
Sheet metal goods	26	78	70	86	16
Ship and boat building	6	103	51	156	105
Soap, lye, potash, etc	9	18	17	20	3
Staves and heading	21	25	18	37	19
Stone, (granite, marble, etc)	10	18	11	24	13
Straw goods	5	111	68	163	95
Toys and games	5	50	37	70	33
Trunks, valises, etc	9	70	57	79	22
Veneer	9	42	36	55	19
Wagons, carriages and sleighs	53	44	41	49	8
Woodenware	11	120	106	133	27
Woolen and worsted goods	17	61	53	72	19
Miscellaneous	13	29	29	32	3
All industries	1,499	58	48	73	25

RANGE OF EMPLOYMENT AND UNEMPLOYMENT—BY INDUSTRIES.

1896 AND 1897.

A comparison of the excess of greatest over smallest number of persons employed in both years is given in the following table. The increase or decrease is noted both in number and percentages. Wage earners only are considered; officers, clerks and other salaried persons are not included.

INDUSTRIES.	No. of establishments.	EXCESS OF GREATEST OVER SMALLEST NUMBER PERSONS EMPLOYED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Number.	Percentages.
Agricultural implements	31	996	818	— 178	— 17.87
Artisans' tools and hardware specialties	10	245	587	+ 342	+ 139.59
Beverages (not spirituous, soft drinks)	18	111	81	— 30	— 27.02
Bicycles, tricycles, etc	7	662	661	— 1	— 0.15
Boots and shoes	24	423	271	— 152	— 35.93
Boxes (wooden and paper)	29	178	374	+ 196	+ 110.11
Brick, tile and sewer pipe	23	544	576	+ 32	+ 5.88
Brooms, brushes, etc	19	90	135	+ 45	+ 50.00
Burial cases, caskets, coffins, etc	4	17	25	+ 8	+ 47.05
Cement, lime, plaster, etc	12	252	360	+ 108	+ 42.85
Chairs	13	160	327	+ 167	+ 104.37
Chemical preparations	13	42	30	— 12	— 28.57
Cigars, snuff and tobacco	54	252	68	+ 184	+ 73.01
Clothing	25	256	226	— 30	— 11.71
Coal and wood	28	1,024	1,439	+ 415	+ 40.52
Confectioneries, crackers, etc	12	75	256	+ 181	+ 241.33
Cooking and heating apparatus	24	372	441	+ 69	+ 18.54
Cooperage	21	139	230	+ 91	+ 65.46
Cotton and linen goods	5	122	326	+ 204	+ 167.21
Electrical and gas apparatus and supplies	21	172	181	+ 9	+ 523
Electrical and gas lighting, power and street railways	49	405	443	+ 38	+ 9.38
Fancy articles	8	85	90	+ 5	+ 5.88
Flour and feed	86	119	97	— 22	— 18.48
Food preparations	31	2,362	2,800	+ 438	+ 18.54
Furniture	42	703	633	— 70	— 9.95
Furs, gloves and mittens	11	162	109	— 53	— 32.71
Grain and warehouse men	12	137	130	— 7	— 5.10
Iron goods (malleable)	25	585	1,490	+ 905	+ 154.70
Iron (pig)	2	106	131	+ 25	+ 23.58
Knit goods	15	302	587	+ 285	+ 94.37
Lager beer	71	212	368	+ 156	+ 73.58
Laundries	75	238	174	— 64	— 26.89
Leather	33	797	1.128	+ 331	+ 41.53
Lithographing and engraving	7	30	23	— 7	— 23.33
Lumber, lath and shingles	168	11.587	14.511	+ 2,924	+ 25.23
Malt	20	216	227	+ 11	+ 5.09
Machines and machinery	86	1,129	1,055	— 74	— 6.55
Mixed textiles	9	141	111	— 30	— 21.27
Office and saloon fixtures, etc	15	299	291	+ 8	+ 2.67
Paints, oils and crude chemicals	7	50	38	— 12	— 24.
Paper and pulp	34	893	823	— 70	— 8.17
Printers' supplies	4	23	12	— 11	— 47.82
Railway equipment	20	1,605	933	— 672	— 41.86
Saddlery, harness, etc	9	70	71	+ 1	+ 1.42

RANGE OF EMPLOYMENT AND UNEMPLOYMENT—BY INDUSTRIES—Cont.

1896 AND 1897.

A comparison of the excess of greatest over smallest number of persons employed in both years is given in the following table. The increase or decrease is noted both in number and percentage. Wage earners only are considered; officers, clerks and other salaried persons are not included.

Industries.	No. of establishments	Excess of Greatest over Smallest Number Persons Employed.		Increase (+) or Decrease (—) in 1897.	
		1896.	1897.	Number.	Percentages.
Sash, doors, blinds and moulding	73	998	1,227	+ 229	+ 22.94
Sheet metal goods	26	515	406	— 109	— 21.16
Ship and boat building	6	1,181	629	— 552	— 46.74
Soap, lye, potash, etc	9	21	29	+ 8	+ 38.09
Staves and heading	21	349	405	+ 56	+ 16.04
Stone, (granite, marble, etc.)	10	142	130	— 12	— 8.45
Straw goods	5	441	474	+ 33	+ 7.48
Toys and games	5	157	178	+ 21	+ 13.37
Trunks, valises, etc	9	181	196	+ 15	+ 8.30
Veneer	9	180	163	— 17	— 9.44
Wagons, carriages and sleighs	53	888	448	— 440	— 49.54
Woodenware	11	105	298	+ 193	+ 183.80
Woolen and worsted goods	17	396	316	— 80	— 22.72
Miscellaneous	13	35	46	+ 11	+ 31.42
All industries	1,499	33,977	38,632	+ 4,655	+ 13.70

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES, BY MONTHS—1896 AND 1897.

The following table shows the aggregate number of persons employed, by sex, during each month of the years 1896 and 1897.

AGRICULTURAL IMPLEMENTS (31 ESTABLISHMENTS).

Months.	1896			1897		
	Males.	Females.	Total.	Males.	Females.	Total.
January	2,481	1	2,482	1,864	1	1,865
February	2,488	1	2,489	2,146	1	2,147
March	2,512	1	2,513	2,199	1	2,200
April	2,256	1	2,257	1,999	1	2,000
May	1,925	1	1,926	1,793	1	1,794
June	1,823	1	1,824	1,749	1	1,750
July	1,785	1	1,786	1,716	1	1,717
August	1,556	1	1,557	1,590	1	1,591
September	1,668	1	1,669	1,567	1	1,568
October	1,516	1	1,517	1,685	1	1,686
November	1,636	1	1,637	1,877	1	1,878
December	1,812	1	1,813	2,191	1	2,192

ARTISANS' TOOLS AND HARDWARE SPECIALTIES (10 ESTABLISHMENTS).

January	449	....	449	494	....	494
February	465	....	465	441	....	441
March	447	....	447	380	....	380
April	449	....	449	384	....	384
May	367	....	367	383	....	383
June	283	....	283	331	....	331
July	258	....	258	335	....	335
August	252	....	252	356	....	356
September	232	....	232	420	....	420
October	310	....	310	486	....	486
November	342	....	342	592	....	592
December	422	....	422	714	....	714

BEVERAGES,—NOT SPIRITUOUS, SOFT DRINKS—(18 ESTABLISHMENTS).

January	136	....	136	159	1	160
February	204	....	204	171	3	174
March	168	17	185	180	20	200
April	169	17	186	177	17	194
May	174	17	191	198	20	218
June	186	17	203	192	18	210
July	195	17	212	212	20	232
August	220	17	237	210	18	228
September	201	17	218	208	20	228
October	173	15	188	176	20	196
November	176	17	193	186	22	208
December	168	15	183	181	21	202

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES, BY MONTHS—1896 AND 1897—Continued.

BICYCLES, TRICYCLES, ETC. (7 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	668	1	669	686	....	686
February	764	1	765	759	....	759
March	801	1	802	773	....	773
April	899	7	906	858	1	859
May	902	7	909	862	1	863
June	815	6	821	709	1	710
July	675	1	676	598	....	598
August	530	1	531	505	....	505
September	308	1	309	301	....	301
October	482	1	483	530	....	530
November	586	1	587	626	....	626
December	666	1	667	684	....	684

BOOTS AND SHOES (24 ESTABLISHMENTS).

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	1,608	773	2,381	1,618	779	2,397
February	1,633	747	2,380	1,630	810	2,440
March	1,580	780	2,360	1,591	793	2,384
April	1,549	746	2,295	1,593	775	2,368
May	1,516	728	2,244	1,575	743	2,318
June	1,498	711	2,209	1,506	714	2,220
July	1,486	686	2,172	1,507	686	2,193
August	1,507	666	2,173	1,547	719	2,266
September	1,484	688	2,172	1,534	719	2,253
October	1,524	690	2,214	1,548	700	2,248
November	1,389	623	2,012	1,501	685	2,186
December	1,538	699	2,237	1,568	743	2,311

BOXES—WOODEN AND PAPER—(29 ESTABLISHMENTS).

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	793	297	1,090	836	344	1,180
February	805	324	1,129	831	354	1,185
March	836	374	1,210	901	395	1,296
April	871	345	1,216	920	382	1,302
May	914	345	1,259	964	377	1,331
June	895	333	1,228	989	375	1,364
July	876	331	1,207	1,029	373	1,402
August	869	334	1,203	1,012	369	1,381
September	853	356	1,209	1,049	391	1,440
October	835	360	1,195	1,021	398	1,419
November	847	361	1,208	1,022	406	1,428
December	834	354	1,188	907	396	1,303

BRICK, TILE AND SEWER PIPE (23 ESTABLISHMENTS).

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	66	....	66	56	....	56
February	71	....	71	80	....	80
March	101	....	101	77	....	77
April	138	....	138	204	....	204
May	422	....	422	462	....	462
June	598	....	598	570	....	570
July	600	....	600	541	....	541
August	560	....	560	428	....	428
September	446	....	446	379	....	379
October	197	....	197	329	....	329
November	79	....	79	149	....	149
December	56	....	56	80	....	80

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES, BY MONTHS—1896 AND 1897—Continued.

BROOMS, BRUSHES AND BASKETS (19 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	142	3	145	153	2	155
February	154	3	157	158	2	160
March	182	3	185	209	6	215
April	220	6	226	213	6	219
May	220	6	226	228	6	234
June	204	5	209	221	6	227
July	216	5	221	233	6	239
August	218	5	223	240	6	246
September	212	5	217	233	2	235
October	184	3	187	214	2	216
November	166	3	169	182	2	184
December	144	2	146	151	2	153

BURIAL CASES, CASKETS, COFFINS, ETC. (4 ESTABLISHMENTS).

Months.	1896. Males.	1896. Females.	1896. Total.	1897. Males.	1897. Females.	1897. Total.
January	243	57	300	232	74	306
February	243	57	300	234	74	308
March	243	57	300	234	74	308
April	247	57	304	237	74	311
May	246	57	303	237	74	311
June	244	57	301	242	74	316
July	246	57	303	243	74	317
August	246	57	303	242	74	316
September	243	57	300	242	74	316
October	240	57	297	243	74	317
November	240	57	297	245	74	319
December	240	57	297	244	74	318

CEMENT, LIME, PLASTER, ETC. (12 ESTABLISHMENTS).

Months.	1896. Males.	1896. Females.	1896. Total.	1897. Males.	1897. Females.	1897. Total.
January	189	1	190	192	1	193
February	182	1	183	251	1	252
March	208	1	209	226	1	227
April	275	2	277	241	2	243
May	359	2	361	338	2	340
June	375	2	377	364	2	366
July	373	2	375	341	2	343
August	374	2	376	398	2	400
September	374	2	376	457	2	459
October	366	2	368	494	2	496
November	246	1	247	337	1	338
December	210	1	211	280	1	281

CHAIRS (13 ESTABLISHMENTS).

Months.	1896. Males.	1896. Females.	1896. Total.	1897. Males.	1897. Females.	1897. Total.
January	2,436	312	2,748	2,486	248	2,734
February	2,496	324	2,820	2,726	276	3,002
March	2,516	326	2,842	2,842	287	3,129
April	2,516	324	2,840	2,827	280	3,107
May	2,471	315	2,786	2,913	280	3,193
June	2,468	306	2,774	2,800	271	3,071
July	2,436	296	2,732	2,737	255	2,992
August	2,399	290	2,689	2,818	249	3,067
September	2,456	298	2,754	2,899	281	3,180
October	2,482	297	2,779	2,953	288	3,241
November	2,463	302	2,765	2,983	295	3,278
December	2,444	303	2,747	2,824	279	3,103

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

CHEMICAL PREPARATIONS (13 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	104	22	126	121	18	139
February	109	21	130	118	18	136
March	110	20	130	120	18	138
April	113	24	137	120	20	140
May	116	27	143	123	19	142
June	118	27	145	124	21	145
July	114	27	141	120	23	143
August	117	25	142	122	24	146
September	126	25	151	122	34	156
October	118	27	145	125	36	161
November	111	28	139	120	35	155
December	111	47	158	120	28	148

CIGARS, SNUFF AND TOBACCO (54 ESTABLISHMENTS).

January	603	165	768	658	269	927
February	666	253	919	673	278	951
March	670	253	923	662	276	938
April	670	255	925	657	279	936
May	665	241	906	686	294	980
June	668	253	921	679	299	978
July	665	258	923	659	285	944
August	670	257	927	676	292	968
September	671	260	931	675	290	965
October	671	251	922	670	284	954
November	671	258	929	679	281	960
December	575	170	745	680	280	960

CLOTHING (25 ESTABLISHMENTS).

January	338	1,443	1,781	287	1,294	1,581
Februray	349	1,472	1,821	296	1,293	1,589
March	357	1,433	1.790	307	1,286	1,593
April	357	1,441	1,798	326	1,278	1,604
May	366	1,392	1,758	330	1,292	1,622
June	368	1,378	1,746	335	1,284	1,619
July	348	1,370	1,718	320	1,297	1,617
August	349	1,359	1,708	326	1,246	1,572
September	345	1,330	1,675	331	1,304	1,635
October	348	1,385	1,733	332	1,367	1,699
November	339	1.357	1,696	326	1,346	1,672
December	336	1,274	1,610	322	1,310	1,632

COAL AND WOOD (28 ESTABLISHMENTS).

January	1,177	4	1.181	1,395	....	1,395
February	1.120	4	1,124	1,373	....	1,373
March	1.041	4	1,045	1,280	....	1,280
April	1,280	4	1,284	1,369	....	1,369
May	1,588	4	1,592	1,550	....	1,550
June	1,440	4	1,444	1,567	....	1,567
July	1,507	4	1,511	1,674	....	1,674
August	1,492	4	1,496	1,711	....	1,711
September	1,620	4	1,624	1,679	....	1,679
October	1,865	4	1,869	2.554	....	2,554
November	1,788	4	1,792	2,507	....	2,507
December	1,590	4	1,594	2,449	....	2,449

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

CONFECTIONERIES, CRACKERS, ETC. (12 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	344	323	667	322	313	635
February	344	324	668	318	326	644
March	346	332	678	336	352	688
April	348	329	677	329	372	701
May	364	327	691	341	379	720
June	369	336	705	351	384	735
July	358	338	696	339	344	683
August	355	334	689	342	360	702
September	358	341	699	356	419	775
October	365	371	736	364	471	835
November	365	374	739	372	497	869
December	365	377	742	358	468	826

COOKING AND HEATING APPARATUS (24 ESTABLISHMENTS.)

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	931	6	937	1.131	6	1,137
February	1,148	11	1,159	1,241	10	1.251
March	1,135	12	1,147	1,240	10	1,250
April	1,134	10	1,144	1,187	8	1,195
May	1,205	10	1,215	1,336	8	1.344
June	1,200	7	1,207	1,283	6	1,289
July	1,105	7	1,112	1.131	6	1,137
August	1,187	7	1,194	1.162	6	1.168
September	1,200	7	1.207	1,214	6	1,220
October	1,214	7	1.221	1.307	6	1.313
November	1,197	7	1,204	1.352	6	1,358
December	1,125	6	1,131	1,295	6	1,301

COOPERAGE (21 ESTABLISHMENTS).

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	676	....	676	594	....	594
February	697	....	697	650	....	650
March	708	....	708	668	....	668
April	702	....	702	673	....	673
May	698	....	698	687	....	687
June	680	....	680	680	....	680
July	644	....	644	674	....	674
August	627	....	627	568	....	568
September	615	....	615	543	....	543
October	626	....	626	581	....	581
November	639	....	639	591	....	591
December	585	....	585	613	....	613

COTTON AND LINEN GOODS (5 ESTABLISHMENTS).

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January	240	377	617	202	301	503
February	239	380	619	197	294	491
March	239	379	618	197	296	493
April	202	319	521	235	346	581
May	199	324	523	238	344	582
June	197	317	514	195	293	488
July	194	315	509	112	162	274
August	193	314	507	183	271	454
September	199	318	517	195	284	479
October	206	359	565	195	281	476
November	208	349	557	195	285	480
December	210	346	556	179	266	445

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

ELECTRICAL AND GAS APPARATUS AND SUPPLIES (21 ESTABLISHMENTS).

Months	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	951	50	1,001	978	40	1,018
February	966	45	1,011	983	50	1,033
March	1,064	47	1,111	1,034	48	1,082
April	1,070	47	1,117	1,028	52	1,080
May	1,080	50	1,130	1,023	51	1,074
June	1,061	48	1,109	1,026	49	1,075
July	1,057	47	1,104	1,014	39	1,053
August	946	43	989	964	34	998
September	946	42	988	968	42	1,010
October	948	44	992	983	41	1,024
November	922	47	969	979	41	1,020
December	923	47	970	1,025	49	1,074

ELECTRICAL AND GAS LIGHTING, POWER AND STREET RAILWAYS (49 ESTABLISHMENTS).

January	1,768	8	1,776	1,776	5	1,781
February	1,772	8	1,780	1,759	5	1,764
March	1,768	8	1,776	1,784	5	1,789
April	1,926	8	1,934	1,865	5	1,870
May	2,033	7	2,040	1,993	5	1,998
June	2,067	7	2,074	2,024	5	2,029
July	2,083	7	2,090	2,031	5	2,036
August	2,094	7	2,101	1,998	5	2,003
September	1,969	7	1,976	1,999	5	2,004
October	1,970	7	1,977	2,055	5	2,060
November	1,858	5	1,863	1,910	5	1,915
December	1,697	4	1,701	1,850	5	1,855

FANCY ARTICLES (8 ESTABLISHMENTS).

January	74	12	86	75	12	87
February	75	13	88	82	13	95
March	81	13	94	84	12	96
April	88	13	101	88	11	99
May	82	13	95	97	13	110
June	93	23	116	107	18	125
July	97	20	117	108	16	124
August	99	20	119	118	24	142
September	101	22	123	126	28	154
October	103	22	125	130	28	158
November	107	34	141	128	40	168
December	107	31	138	139	38	177

FLOUR AND FEED (86 ESTABLISHMENTS).

January	1,020	5	1,025	1,103	5	1,108
February	1,104	5	1,109	1,109	5	1,114
March	1,029	5	1,034	1,105	5	1,110
April	1,050	5	1,055	1,125	5	1,130
May	1,120	5	1,125	1,122	5	1,127
June	1,120	6	1,126	1,133	6	1,139
July	1,126	6	1,132	1,135	6	1,141
August	1,105	6	1,111	1,125	6	1,181
September	1,101	6	1,107	1,123	6	1,129
October	1,120	6	1,126	1,160	6	1,166
November	1,107	6	1,113	1,165	6	1,171
December	1,079	6	1,085	1,118	6	1,124

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

FOOD PREPARATIONS (31 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	1,656	110	1,766	1,710	111	1.821
February	1,557	121	1,678	1,613	122	1,735
March	1,502	97	1,599	1,500	127	1,627
April	1,424	101	1,525	1.387	130	1,517
May	1,474	104	1,578	1.419	131	1,550
June	2,101	367	2,468	1,452	141	1,593
July	2,152	479	2,631	2,269	892	3.161
August	1,948	432	2.380	2,392	1,215	3.607
September	1,656	260	1,916	2,000	945	2,945
October	1,630	144	1,774	1.836	376	2,212
November	1,548	150	1,698	1.646	137	1,783
December	1,635	123	1,758	1,742	121	1,863

FURNITURE (42 ESTABLISHMENTS).

January	2,634	54	2,688	2,176	29	2,205
February	2,726	55	2,781	2.305	29	2.334
March	2,920	64	2,984	2,514	34	2,548
April	2.889	64	2.953	2,599	36	2,635
May	2,648	66	2,714	2.470	36	2.506
June	2,546	66	2,612	2,328	34	2.362
July	2,268	59	2,327	2,032	29	2,061
August	2,255	62	2,317	2,239	30	2,269
September	2,471	71	2,542	2,506	38	2,544
October	2,456	65	2,521	2,551	39	2,590
November	3.452	59	3.511	2,615	36	2,651
December	2,516	56	2,572	2,557	31	2,588

FURS, GLOVES AND MITTENS (11 ESTABLISHMENTS).

January	162	155	317	106	122	227
February	164	157	321	104	122	226
March	167	171	338	106	133	239
April	171	192	363	112	159	271
May	172	223	395	114	183	297
June	174	221	395	116	192	308
July	174	234	408	118	200	318
August	173	249	422	117	210	327
September	171	252	423	116	214	330
October	163	255	418	112	216	328
November	153	189	342	110	170	280
December	144	148	292	110	152	262

GRAIN AND WAREHOUSE MEN (12 ESTABLISHMENTS).

January	164	1	165	151	....	151
February	147	1	148	163	....	163
March	149	1	150	162	....	162
April	140	1	141	155	....	155
May	146	1	147	172	....	172
June	141	....	141	166	....	166
July	132	....	132	154	....	154
August	133	....	133	171	....	171
September	136	....	136	219	....	219
October	149	....	149	223	....	223
November	208	1	209	259	....	259
December	155	1	156	179	....	179

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

IRON GOODS—MALLEABLE—(25 ESTABLISHMENTS).

Months	1896.			1897.		
	Males	Females.	Total.	Males.	Females.	Total.
January	3,260	....	3,260	2,791	15	2,806
February	3,410	....	3,410	3,357	8	3,365
March	3,360	....	3,360	3,309	10	3,319
April	3,416	....	3,416	3,191	11	3,202
May	3,567	....	3,567	3,060	12	3,072
June	3,517	....	3,517	3,342	12	3,354
July	3,087	....	3,087	2,579	15	2,594
August	3,198	....	3,198	3,233	23	3,256
September	3,069	....	3,069	3,655	23	3,678
October	3,420	....	3,420	4,054	23	4,077
November	3,380	....	3,380	3,857	27	3,884
December	3,096	....	3,096	3,572	19	3,591

IRON—PIG—(2 ESTABLISHMENTS).

January	159	....	159	179	....	179
February	161	....	161	188	....	188
March	162	....	162	180	....	180
April	171	....	171	89	....	89
May	116	....	116	93	....	93
June	96	....	96	113	....	113
July	93	....	93	92	....	92
August	93	....	93	121	....	121
September	85	....	85	140	....	140
October	87	....	87	158	....	158
November	85	....	85	160	....	160
December	87	....	87	212	....	212

KNIT GOODS (15 ESTABLISHMENTS).

January	241	1,179	1,420	300	1,066	1,366
February	267	1,166	1,433	301	1,170	1,471
March	244	1,265	1,509	316	1,277	1,593
April	256	1,781	2,037	323	1,362	1,685
May	261	1,416	1,677	331	1,443	1,774
June	259	1,414	1,673	329	1,490	1,819
July	264	1,405	1,669	346	1,552	1,898
August	260	1,295	1,555	344	1,590	1,934
September	287	1,394	1,681	345	1,569	1,914
October	260	1,355	1,615	344	1,544	1,888
November	254	1,330	1,584	340	1,528	1,868
December	272	1,142	1,414	334	1,472	1,806

LAGER BEER (71 ESTABLISHMENTS).

January	2,709	364	3,073	2,796	219	3,015
February	2,719	381	3,100	2,775	209	2,984
March	2,760	390	3,150	2,794	219	3,013
April	2,735	348	3,083	2,838	234	3,072
May	2,790	342	3,132	2,876	269	3,145
June	2,818	347	3,165	2,886	269	3,155
July	2,872	350	3,222	2,960	270	3,230
August	2,881	353	3,234	2,885	270	3,155
September	2,870	322	3,192	2,856	265	3,121
October	2,837	271	3,108	2,843	255	3,098
November	2,823	261	3,084	2,844	219	3,063
December	2,901	255	3,156	3,033	214	3,247

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

LAUNDRIES (75 ESTABLISHMENTS).

Months	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	114	531	645	179	524	703
February	192	526	718	179	521	700
March	198	532	730	189	535	724
April	200	553	753	192	558	750
May	201	571	772	196	587	783
June	208	614	822	202	613	815
July	196	587	783	205	650	855
August	213	658	871	207	657	864
September	214	625	839	211	629	840
October	191	585	776	209	596	805
November	208	557	765	207	577	784
December	124	544	668	203	570	773

LEATHER (33 ESTABLISHMENTS).

Months	Males.	Females.	Total.	Males.	Females.	Total.
January	3,839	236	4,075	3,936	265	4,201
February	3.858	238	4,096	4,072	267	4,339
March	3.837	238	4,075	4,119	267	4,386
April	4.104	41	4,145	4,156	269	4,425
May	4,178	248	4 426	4,768	278	5,046
June	4,218	247	4,465	4,937	275	5,212
July	4,519	244	4,763	5,055	274	5,329
August	4,294	245	4,539	4,487	275	4,762
September	4,223	246	4,469	4,555	276	4,831
October	4,150	253	4,403	4,676	281	4,957
November	4,065	252	4,317	4,596	281	4,877
December	4,063	250	4,313	4,400	280	4,680

LITHOGRAPHING AND ENGRAVING (7 ESTABLISHMENTS).

Months	Males.	Females.	Total.	Males.	Females.	Total.
January	403	37	440	402	29	431
February	405	36	441	401	30	431
March	400	35	435	405	32	437
April	406	35	441	410	32	442
May	404	35	439	410	32	442
June	401	35	436	410	31	441
July	397	35	432	405	34	439
August	399	35	434	409	35	444
September	405	36	441	410	32	442
October	406	36	442	418	31	449
November	399	36	435	412	33	445
December	397	37	434	405	35	440

LUMBER, LATH AND SHINGLES (168 ESTABLISHMENTS).

Months	Males.	Females.	Total.	Males.	Females.	Total.
January	7,954	34	7,988	5,167	28	5,195
February	8,394	34	8,428	5.825	28	5.853
March	8,379	48	8,427	6,861	33	6.894
April	12.737	74	12,811	12,563	67	12,630
May	15,347	116	15,463	15,820	74	15,894
June	16,093	116	16,209	16,686	87	16.773
July	16,188	131	16.319	16.280	99	16,379
August	14,993	142	15,135	15,933	99	16.032
September	12.699	82	12,781	15,514	82	15,596
October	10,421	67	10,488	14,237	80	14.317
November	8,117	26	8,143	10,331	54	10,385
December	6,292	21	6,313	5,927	29	5,956

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

MALT (20 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	558	....	558	567	....	567
February	578	....	578	578	....	578
March	559	....	559	560	....	560
April	553	....	553	562	....	562
May	537	....	537	566	....	566
June	476	....	476	513	....	513
July	368	....	368	367	....	367
August	403	....	403	363	....	363
September	412	....	412	423	....	423
October	512	....	512	542	....	542
November	557	....	557	574	....	574
December	552	....	552	567	....	567

MACHINES AND MACHINERY (86 ESTABLISHMENTS).

January	4,609	15	4,624	4,184	17	4,201
February	4,386	15	4,401	4,320	18	4,338
March	4,638	15	4,653	4,453	17	4,470
April	4,693	15	4,708	4,486	17	4,503
May	4,530	15	4,545	4,438	18	4,456
June	4,360	15	4,375	4,464	18	4,482
July	4,314	16	4,330	4,613	19	4,632
August	4,316	16	4,332	4,661	19	4,680
September	4,147	16	4,163	4,688	18	4,706
October	4,022	16	4,038	4,535	18	4,553
November	3,828	15	3,843	4,434	17	4,451
December	3,778	14	3,792	4,346	17	4,363

MIXED TEXTILES (9 ESTABLISHMENTS).

January	159	210	369	146	183	329
February	154	193	347	142	175	317
March	154	190	344	146	177	323
April	161	321	482	155	208	363
May	156	217	373	158	216	374
June	156	221	377	159	217	376
July	156	185	341	152	174	326
August	160	186	346	153	174	327
September	163	200	363	159	202	361
October	166	209	375	164	208	372
November	163	200	363	162	199	361
December	163	181	344	153	191	344

OFFICE AND SALOON FIXTURES, ETC. (15 ESTABLISHMENTS).

January	576	....	576	449	....	449
February	537	....	537	435	....	435
March	486	....	486	422	....	422
April	594	....	594	496	....	496
May	638	....	638	540	....	540
June	677	....	677	578	....	578
July	674	....	674	584	....	584
August	727	....	727	617	....	617
September	719	....	719	623	....	623
October	713	....	713	642	....	642
November	674	....	674	680	....	680
December	556	....	555	626	....	626

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

PAINTS, OILS, AND CRUDE CHEMICALS (7 ESTABLISHMENTS).

Months	1896			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	129	1	130	142	1	143
February	129	1	130	142	1	143
March	129	1	130	142	1	143
April	132	1	133	145	1	146
May	132	1	133	145	1	146
June	128	1	129	129	1	130
July	109	1	110	129	1	130
August	87	1	88	125	1	126
September	105	1	106	143	1	144
October	102	1	103	140	1	141
November	117	1	118	140	1	141
December	111	1	112	138	1	139

PAPER AND PULP (34 ESTABLISHMENTS).

January	2,400	680	3,080	2,430	620	3,050
February	2,452	704	3,156	2,452	624	3,076
March	2,604	757	3,361	2,646	628	3,274
April	2,653	704	3,357	2,589	633	3.222
May	2,727	678	3,405	2,628	636	3,264
June	2,643	659	3,302	2,549	625	3,174
July	2,453	486	2,939	2,426	637	3,063
August	2,364	502	2.866	2,289	604	2,893
September	2,270	504	2.774	2,401	603	3,004
October	2,551	646	3,197	2,615	629	3.244
November	2,613	651	3.264	2.646	665	3,311
December	2,699	647	3,346	2,602	647	3,249

PRINTERS' SUPPLIES (4 ESTABLISHMENTS).

January	167	6	173	184	6	190
February	178	6	184	185	6	191
March	188	6	194	189	10	199
April	188	6	194	189	6	195
May	179	6	185	183	6	189
June	177	6	183	183	6	189
July	182	6	188	183.	6	189
August	181	6	187	183	6	189
September	180	6	186	183	6	189
October	178	6	184	181	6	187
November	182	6	188	182	6	188
December	184	6	190	182	6	188

RAILROAD EQUIPMENT (20 ESTABLISHMENTS).

January	5,378	7	5,385	9,597	5	9,602
February	5,493	7	5,500	9,639	5	9,644
March	5,419	6	5,425	9,557	5	9,562
April	5,464	7	5,471	9,616	5	9,621
May	5,350	7	6.357	9,544	5	9,549
June	5,249	7	5.256	9,478	5	9.483
July	5,141	7	5,148	9.580	5	9,585
August	5,130	7	5.137	9,762	5	9,767
September	5,164	7	5,171	10,119	5	10.124
October	5,150	7	5,157	10,106	5	10.111
November	5,045	7	5,052	10,103	5	10.108
December	4,888	7	4,895	10,040	5	10.045

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

SADDLERY, HARNESS, ETC. (9 ESTABLISHMENTS).

Months	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	115	33	148	155	39	194
February	122	25	147	163	30	193
March	148	38	186	184	45	229
April	151	42	193	194	47	241
May	156	34	190	194	38	232
June	138	30	168	180	32	212
July	137	27	164	184	35	219
August	125	6	131	185	25	210
September	125	6	131	192	9	201
October	135	16	151	199	20	219
November	128	18	146	189	21	210
December	132	29	161	186	32	218

SASH, DOORS, BLINDS, ETC. (73 ESTABLISHMENTS).

January	2,681	35	2,716	3,496	38	3,534
February	2,800	35	2,835	2,748	40	2,788
March	2,922	35	2,957	2,979	40	3,019
April	3,418	39	3,457	3,519	44	3,563
May	3,543	43	3,586	3,643	43	3,686
June	3,545	39	3,584	3,840	44	3,884
July	3,646	40	3,686	3,856	46	3,902
August	3,397	40	3,437	3,638	45	3,683
September	3,221	35	3,256	3,614	40	3,654
October	3,107	35	3,142	3,559	39	3,598
November	3,017	33	3,050	3,471	38	3,509
December	2,749	34	2,783	3,236	38	3,274

SHEET METAL GOODS (26 ESTABLISHMENTS).

January	1,256	211	1,467	1,492	341	1,833
February	1,322	223	1,545	1,577	359	1,936
March	1,286	220	1,506	1,584	353	1,937
April	1,332	221	1,553	1,626	356	1,982
May	1,330	212	1,542	1,669	358	2,027
June	1,340	211	1,551	1,779	356	2,135
July	1,351	213	1,564	1,688	353	2,041
August	1,373	219	1,592	1,755	361	2,116
September	1,426	221	1,647	1,794	372	2,166
October	1,397	236	1,633	1,799	373	2,172
November	1,383	237	1,620	1,740	377	2,117
December	1,301	208	1,509	1,670	368	2,038

SHIP BUILDING (6 ESTABLISHMENTS).

January	1,008	2	1,010	845	1	846
February	1,204	2	1,206	804	1	805
March	1,339	2	1,341	863	1	864
April	1,264	2	1,266	937	2	939
May	1,461	2	1,463	790	3	793
June	1,364	2	1,366	394	2	396
July	1,110	4	1,114	363	2	365
August	818	3	821	431	3	434
September	382	3	385	308	2	310
October	474	2	476	442	1	443
November	433	1	434	431	....	431
December	636	2	638	837	....	837

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

SOAP, LYE AND POTASH (9 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	98	40	138	106	46	152
February	97	89	136	108	45	153
March	100	42	142	112	47	159
April	96	36	132	120	49	169
May	97	88	135	118	48	166
June	95	38	133	112	54	166
July	92	39	131	114	54	168
August	91	35	126	121	51	172
September	91	85	126	122	48	170
October	93	36	129	124	49	173
November	95	37	132	120	47	167
December	96	37	133	117	46	163

STAVES AND HEADING (21 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	434	....	434	545	....	545
February	561	....	561	629	....	629
March	556	....	556	684	....	684
April	575	....	575	695	....	695
May	511	....	511	598	....	598
June	488	....	488	535	....	535
July	415	....	415	461	....	461
August	353	....	353	428	....	428
September	383	....	383	407	....	407
October	316	....	316	375	....	375
November	347	....	347	426	....	426
December	361	....	361	474	....	474

STONE (MARBLE, GRANITE, ETC. (10 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	103	....	103	116	....	116
February	116	....	116	121	....	121
March	131	....	131	132	....	132
April	158	....	158	175	....	175
May	213	....	213	194	....	194
June	233	....	233	210	....	210
July	215	....	215	241	....	241
August	218	....	218	229	....	229
September	205	....	205	223	....	223
October	151	....	151	195	....	195
November	163	....	163	194	....	194
December	166	....	166	158	....	158

STRAW GOODS (5 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	280	370	650	242	319	561
February	275	370	645	255	321	576
March	327	520	847	300	466	766
April	329	520	849	312	462	774
May	327	503	830	331	486	817
June	226	253	479	261	227	488
July	195	213	408	227	116	343
August	197	213	410	237	122	359
September	200	213	413	271	146	417
October	216	223	439	297	163	460
November	296	373	669	308	222	530
December	283	353	636	290	286	576

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

TOYS AND GAMES (5 ESTABLISHMENTS).

Months.	1896.			1897.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	165	15	180	172	14	186
February	196	17	213	182	18	200
March	165	19	184	176	16	192
April	198	10	208	175	11	186
May	203	12	215	181	10	191
June	227	16	243	208	15	223
July	235	24	259	220	17	237
August	248	47	295	257	29	286
September	259	49	308	277	33	310
October	248	44	292	286	47	333
November	258	37	295	307	47	354
December	247	32	279	301	36	337

TRUNKS, VALISES, ETC. (9 ESTABLISHMENTS).

January	572	44	616	581	50	631
February	569	46	615	592	51	643
March	561	45	606	574	48	622
April	561	44	605	567	50	617
May	557	32	589	591	56	647
June	566	33	599	600	57	657
July	581	39	620	616	63	679
August	600	46	646	638	64	702
September	586	45	631	636	67	703
October	536	28	564	619	62	681
November	446	32	478	468	46	514
December	446	32	478	472	49	521

VENEER (9 ESTABLISHMENTS).

January	258	1	259	331	....	331
February	280	1	281	359	....	359
March	297	1	298	368	....	368
April	323	1	324	381	....	381
May	317	1	318	374	....	374
June	316	1	317	378	....	378
July	342	1	343	426	....	426
August	323	1	324	494	....	494
September	313	1	314	425	....	425
October	292	1	293	389	....	389
November	227	1	228	344	....	344
December	228	1	229	351	....	351

WAGONS, CARRIAGES AND SLEIGHS (53 ESTABLISHMENTS).

January	2,079	41	2,120	2,156	42	2,198
February	2,157	42	2,199	2,151	42	2,193
March	2,260	45	2,305	2,234	42	2,276
April	2,239	46	2,285	2,311	44	2,355
May	2,381	54	2,435	2,423	44	2,467
June	2,370	64	2,434	2,455	45	2,500
July	2,322	59	2,381	2,545	43	2,588
August	2,036	43	2,079	2,407	35	2,442
September	1,732	42	1,774	2,322	32	2,354
October	1,789	31	1,820	2,264	30	2,294
November	1,559	32	1,591	2,320	32	2,352
December	1,535	32	1,567	2,395	37	2,432

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES BY MONTHS—1896 AND 1897—Continued.

WOODENWARE (11 ESTABLISHMENTS).

Months	1896			1897.		
	Males	Females.	Total.	Males.	Females.	Total.
January	1.583	5	1,588	1,172	....	1,172
February	1.597	5	1,602	1.273	....	1,273
March	1,582	5	1,587	1,413	....	1,413
April	1,606	5	1,611	1,365	....	1,365
May	1,608	5	1,613	1,369	....	1,369
June	1,639	5	1,644	1,379	....	1,379
July	1,628	5	1,633	1,330	....	1,330
August	1,622	5	1,627	1,314	....	1.314
September	1,602	5	1,607	1.272	....	1.272
October	1,609	5	1,614	1,257	1	1,258
November	1,607	5	1,612	1,377	1	1,378
December	1,599	5	1,604	1,367	1	1,368

WOOLEN AND WORSTED GOODS (17 ESTABLISHMENTS).

January	399	607	1,006	364	543	907
February	366	567	933	396	567	963
March	362	552	914	441	625	1.066
April	412	622	1,034	464	641	1,105
May	367	542	909	488	647	1.135
June	357	540	897	493	652	1,145
July	329	480	809	497	659	1,156
August	404	587	991	462	608	1,070
September	343	468	811	430	553	983
October	326	461	787	417	546	963
November	279	379	658	439	572	1,011
December	335	515	850	448	628	1.076

MISCELLANEOUS (13 ESTABLISHMENTS).

January	226	165	391	210	168	378
February	232	172	404	207	171	378
March	222	173	395	209	173	382
April	222	173	395	210	176	386
May	216	167	383	210	175	385
June	220	167	387	211	173	384
July	212	169	381	209	170	379
August	213	171	384	203	174	377
September	212	167	379	204	177	381
October	219	173	392	204	177	381
November	215	172	387	201	175	376
December	211	168	379	203	170	373

ALL INDUSTRIES (1,499 ESTABLISHMENTS).

January	65,965	9,049	75,014	66,992	8.554	75,546
February	67,895	9,179	77,074	68,967	8.794	77,760
March	68,655	9,579	78,234	71,252	9,246	80,498
April	74,500	9,965	84,465	77,959	9,524	87,483
May	77,872	9,569	87,441	82,573	9.749	92,322
June	78,332	9,579	87,911	83,232	9.500	92,732
July	76,993	9,333	86,326	82,315	10,015	92,330
August	74,191	9,354	83,545	82,131	10.436	92.567
September	70.254	9,099	79,353	82,383	10,295	92.678
October	68,335	9,116	77,451	83,147	9.826	92,973
November	65.806	8,833	74,739	78,657	9.561	88.218
December	62,174	8,626	70,800	73,805	9,454	83,259

WAGES PAID—BY INDUSTRIES.

1896 AND 1897.

By "Total amount paid in wages" is meant the combined amount paid by the 1,499 establishments for that purpose in each year. Comparisons are made between the two years, and the relative increase or decrease is noted by amount and percentages. Wage earners only are considered; officers, clerks and other salaried persons are not included.

Industries.	No. of establishments.	Total Amount of Wages Paid During Year.		Increase (+) or Decrease (—) in 1897.	
		1896.	1897.	Amount.	Per cent.
Agricultural implements	31	$999,822	$938,930	— $60,892	— 6.09
Artisans' tools and hardware specialties	10	170,303	182,604	+ 12,300	+ 7.22
Beverages (not spirituous, soft drinks)	18	82,665	93,072	+ 10,407	+ 12.58
Bicycles, tricycles, etc	7	306,808	325,609	+ 18,804	+ 6.12
Boots and shoes	24	622,611	686,972	+ 64,361	+ 10.33
Boxes (wooden and paper)	29	336,175	404,765	+ 68,590	+ 20.40
Brick, tile and sewer pipe	23	79,028	79,627	+ 599	+ 0.75
Brooms, brushes and baskets	19	54,895	62,384	+ 7,489	+ 13.64
Burial cases, caskets and coffins	4	98,540	109,629	+ 11,089	+ 11.25
Cement, lime, plaster, etc	12	148,012	147,190	— 822	— 0.55
Chairs	13	772,212	892,360	+ 120,148	+ 15.55
Chemical preparations	13	86,961	100,211	+ 13,250	+ 15.23
Cigars, snuff and tobacco	54	411,006	441,261	+ 30,255	+ 7.36
Clothing	25	502,569	532,238	+ 29,669	+ 5.90
Coal and wood	28	663,258	879,412	+ 216,154	+ 32.58
Confectioneries, crackers, etc	12	233,465	262,890	+ 29,425	+ 12.60
Cooking and heating apparatus	24	416,931	458,670	+ 41,739	+ 10.01
Cooperage	21	226,766	213,079	— 13,687	— 6.03
Cotton and linen goods	5	111,746	117,219	+ 5,478	+ 4.90
Electrical and gas apparatus and supplies	21	486,288	497,164	+ 10,876	+ 2.23
Electric and gas lighting, power and street railways	49	1,094,016	1,220,541	+ 126,525	+ 11.56
Fancy articles	8	33,933	41,575	+ 7,642	+ 22.52
Flour and feed	86	547,830	586,731	+ 38,901	+ 6.73
Food preparations	31	852,282	898,879	+ 46,597	+ 5.46
Furniture	42	794,964	727,752	— 67,212	— 8.45
Furs, gloves and mittens	11	125,843	91,034	— 34,809	—27.66
Grain and warehouse men	12	91,487	105,810	+ 14,323	+ 15.65
Iron goods (malleable)	25	1,484,112	1,518,760	+ 34,648	+ 2.33
Iron (pig)	2	44,251	52,807	+ 8,556	+ 19.33
Knit goods	15	324,212	399,430	+ 75,218	+ 23.20
Lager beer	71	1,649,640	1,686,468	+ 36,828	+ 2.23
Laundries	75	219,168	231,775	+ 12,607	+ 5.75
Leather	33	1,790,571	2,028,342	+ 237,771	+ 13.28
Lithographing and engraving	7	206,844	222,156	+ 15,312	+ 7.40
Lumber, lath and shingles	168	3,904,245	4,566,264	+ 662,019	+ 16.95
Malt	20	286,966	296,437	+ 9,471	+ 3.30
Machines and machinery	86	2,195,742	2,343,671	+ 147,929	+ 6.73
Mixed textiles	9	80,851	77,205	— 3,646	— 4.50
Office and saloon fixtures, etc	15	258,154	229,011	— 29,143	—11.28
Paints, oils and crude chemicals	7	76,304	80,128	+ 3,824	+ 5.01
Paper and pulp	34	1,243,243	1,240,476	— 2,767	— 0.22
Printers' supplies	4	69,532	71,751	— 2,219	— 3.19
Railroad equipment	20	2,951,851	5,603,289	+ 2,651,438	+ 89.82
Saddlery, harness, etc	9	54,734	82,136	+ 27,402	+ 50.06
Sash, doors, blinds, etc	73	1,086,510	1,159,449	+ 72,939	+ 6.71
Sheet metal goods	26	562,140	621,091	+ 58,951	+ 10.48

WAGES PAID—BY INDUSTRIES—Continued.

1896 AND 1897.

By "Total amount paid in wages" is meant the combined amount paid by the 1499 establishments for that purpose in each year. Comparisons are made between the two years, and the relative increase or decrease is noted by amount and percentages. Wage owners only are considered; officers, clerks and other salaried persons are not included.

Industries.	No. of establishments.	Total Amount of Wages Paid During Year.		Increase (+) or Decrease (—) in 1896.	
		1896.	1897.	Amount.	Per cent.
Ship and boat building	6	507,701	262,605	— 245,096	—48.26
Soap, lye, potash, etc	9	50,186	71,700	+ 21.514	+ 42.86
Staves and heading	21	116,035	156,852	+ 40,817	+ 35.17
Stone (marble, granite, etc.)	10	79,783	83,756	+ 8,973	+ 4.97
Straw goods	5	210,942	191,874	— 19,068	— 9.03
Toys and games	5	64,468	68,676	+ 4,208	- 6.54
Trunks, valises, etc	9	181,359	203,931	+ 22,572	- 12.44
Veneer	9	87,088	119,510	+ 32,422	- 37.23
Wagons, carriages and sleighs	53	736,689	951,241	+ 214,552	+ 29.12
Woodenware	11	513,206	421,260	— 91,946	—17.91
Woolen and worsted goods	17	234,685	310,176	+ 75,491	+ 32.16
Miscellaneous	13	128,194	133,209	+ 5,015	+ 3.91
All industries	1499	$31,749,822	$36,583,044	+ $4,833,222	+ 15.22

AVERAGE YEARLY EARNINGS—BY INDUSTRIES

1896 AND 1897.

The average yearly earnings in the different industries, shown in the following table, have been obtained by dividing the total amount paid in wages in each industry by the average number of persons employed therein. Comparison is made between the two years, and the relative increase or decrease is noted by amount and percentages. Wage earners only are considered; officers, clerks and other salaried persons are not included.

INDUSTRIES.	No. of establishments.	AVERAGE YEARLY EARNINGS.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amounts.	Per cent
Agricultural implements	31	$538.70	$503.18	— $35.52	— 6.59
Artisans' tools and hardware specialtie.	10	474.38	412.20	— 62.18	—15.08
Beverages (not spirituous, soft drinks).	18	444.43	456.23	+ 11.80	+ 2.65
Bicycles, tricycles, etc	7	453.19	494.97	+ 41.78	+ 9.21
Boots and shoes	24	278.07	298.81	+ 20.74	+ 7.46
Boxes (wooden and paper)	29	281.32	302.97	+ 21.65	+ 7.70
Brick, tile and sewer pipe	23	284.27	284.38	+ .11	+ .03
Brooms, brushes, baskets	19	290.45	301.87	+ 11.42	+ 3.96
Burial cases, caskets, coffins, etc	4	328.46	350.25	+ 21.79	+ 6.63
Cement, lime, plaster, etc	12	500.04	448.75	— 51.29	—10.25
Chairs	13	278.27	288.70	+ 10.43	+ 3.74
Chemical preparations	13	621.15	686.38	+ 65.23	+ 10.50
Cigars, snuff and tobacco	54	459.22	462.05	+ 2.83	+ 0.61
Clothing	25	290.16	328.54	+ 38.38	+ 13.22
Coal and wood	28	453.35	499.95	+ 46.60	+ 10.27
Confectioneries, crackers, etc	12	334.00	358.16	+ 24.16	+ 7.23
Cooking and heating apparatus	24	360.36	367.82	+ 7.46	+ 2.07
Cooperage	21	344.63	339.84	— 4.79	— 1.38
Cotton and linen goods	5	202.44	244.71	+ 42.27	+ 20.88
Electrical and gas apparatus and supplies	21	467.13	475.75	+ 8.62	+ 1.84
Electrical and gas lighting power and street railways	49	587.87	631.75	+ 43.88	+ 7.46
Fancy articles	8	302.97	324.80	+ 21.83	+ 7.20
Flour and feed	86	500.30	518.31	+ 18.01	+ 3.59
Food preparations	31	430.23	424.40	— 5.83	— 1.35
Furniture	42	293.35	298.14	+ 4.79	+ 1.63
Furs, gloves and mittens	11	341.04	320.54	— 20.50	— 6.01
Grain and warehouse men	12	603.25	584.58	— 18.67	— 3.09
Iron goods (malleable)	25	447.69	453.36	+ 5.67	+ 1.26
Iron (pig)	2	381.48	366.72	— 14.76	— 3.86
Knit goods	15	202.00	228.11	+ 26.11	+ 12.43
Lager beer	71	526.54	542.62	+ 16.08	+ 3.05
Laundries	75	288.00	296.01	+ 8.01	+ 2.78
Leather	33	412.57	426.66	+ 14.09	+ 3.41
Lithographing and engraving	7	473.00	504.90	+ 31.90	+ 6.74
Lumber, lath and shingles	168	338.26	386.09	+ 47.83	+ 14.14
Malt	20	568.25	576.71	+ 8.46	+ 1.49
Machine and machinery	86	508.63	522.44	+ 13.81	+ 2.71
Mixed textiles	9	219.70	221.85	+ 2.15	+ 0.98
Office and saloon fixtures, etc	15	409.77	410.41	+ .64	+ 0.15
Paints, oils and crude chemicals	7	518.00	576.46	+ 58.46	+ 11.28
Paper and pulp	34	398.85	393.71	— 5.14	— 1.30
Printers' supplies	4	373.83	377.64	+ 3.81	+ 1.01
Railroad equipment	20	562.68	564.11	+ 1.43	+ 0.25
Saddlery, harness, etc	9	344.24	382.03	+ 37.79	+ 10.97
Sash, doors, blinds, etc	73	338.79	330.61	— 8.18	— 2.41

AVERAGE YEARLY EARNINGS—BY INDUSTRIES—Continued.

1896 AND 1897.

The average yearly earnings in the different industries, shown in the following table, have been obtained by dividing the total amount paid in wages in each industry by the average number of persons employed therein. Comparison is made between the two years, and the relative increase or decrease is noted by amount and percentages. Wage earners only are considered; officers, clerks and other salaried persons are not included.

INDUSTRIES.	No. of establishments.	AVERAGE YEARLY EARNINGS.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amounts.	Per ce
Sheet metal goods	26	360.11	304.15	— 55.96	—15.53
Ship and boat building	6	528.85	422.19	— 106.66	—20.16
Soap, lye, potash, etc	9	377.34	434.54	+ 57.20	+ 15.13
Staves and heading	21	267.67	301.06	+ 33.39	+ 8.85
Stone (marble, granite, etc.)	10	461.17	460.19	— .98	— 0.21
Straw goods	5	348.09	345.72	— 2.37	— 0.68
Toys and games	5	259.95	271.44	+ 11.49	+ 4.43
Trunks, valises, etc	9	308.96	321.15	+ 12.19	+ 3.94
Veneer	9	296.22	310.42	+ 14.20	+ 4.78
Wagons, carriages and sleighs	53	353.50	401.37	+ 47.87	+ 13.54
Woodenware	11	318.51	318.17	— .34	— .10
Woolen and worsted goods	17	265.98	295.97	+ 29.99	+ 11.27
Miscellaneous	13	330.40	350.55	+ 20.15	+ 6.09
All industries	1499	$386.63	$416.79	+ $30.16	+ 7.80

CLASSIFIED WEEKLY EARNINGS: BY INDUSTRIES.

1896 AND 1897.

The tables following show a classification of the weekly wages in the different industries, ranging from $25.00 and over per week down to $1.50 or less, and is arranged by sex and age periods. The classifications apply to wage earners only; officers, clerks and other salaried persons are not included.

AGRICULTURAL IMPLEMENTS (31 ESTABLISHMENTS).

Classification of weekly wages	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	29	......	......	......	16	......	......	......
20.00 but under $25.00	71	......	......	......	17	......	......	......
18.00 but under 20.00	36	......	......	......	32	......	......	......
15.00 but under 18.00	127	......	......	......	98	......	......	......
13.00 but under 15.00	112	......	......	......	189	......	......	......
12.00 but under 13.00	285	......	......	......	225	......	......	......
11.00 but under 12.00	73	......	......	......	147	......	......	......
10.00 but under 11.00	136	......	......	......	142	......	......	......
9.00 but under 10.00	408	......	......	......	417	......	......	......
8.00 but under 9.00	102	......	......	......	195	......	......	......
7.00 but under 8.00	418	......	......	......	363	......	......	......
6.00 but under 7.00	261	......	5	1	164	1	62	......
5.50 but under 6.00	21	1	......	......	10	......	3	......
5.00 but under 5.50	11	......	1	......	9	......	14	......
4.50 but under 5.00	78	......	2	......	32	......	34	......
4.00 but under 4.50	19	......	3	......	1	......	14	......
3.50 but under 4.00	36	......	5	......	......	......	20	......
3.00 but under 3.50	27	......	5	......	1	......	19	......
2.50 but under 3.00	4	......	......	......	......	......	3	......
2.00 but under 2.50	2	......	3	1	......	......	2	......
1.50 but under 2.00	1	......	......	......	......	......	......	......
Under $1.50	......	......	1	......	......	......	......	......
Totals	2,257	1	25	2	2,058	1	171	......

ARTISANS' TOOLS AND HARDWARE SPECIALTIES (10 ESTABLISHMENTS).

$25.00 per week and over	2	......	......	......	......	......	......	......
20.00 but under $25.00	1	......	......	......	3	......	......	......
18.00 but under 20.00	4	......	......	......	12	......	......	......
15.00 but under 18.00	26	......	......	......	55	......	......	......
13.00 but under 15.00	34	......	......	......	64	......	......	......
12.00 but under 13.00	25	......	......	......	31	......	......	......
11.00 but under 12.00	2	......	......	......	12	......	......	......
10.00 but under 11.00	23	......	......	......	36	......	......	......
9.00 but under 10.00	27	......	......	......	36	......	......	......
8.00 but under 9.00	15	......	......	......	13	......	......	......
7.00 but under 8.00	41	......	......	......	70	......	......	......
6.00 but under 7.00	49	......	......	......	136	......	......	......
5.50 but under 6.00	6	......	......	......	1	......	9	......
5.00 but under 5.50	14	......	......	......	10	......	27	......
4.50 but under 5.00	17	......	1	......	3	......	40	......
4.00 but under 4.50	17	......	2	......	......	......	47	......
3.50 but under 4.00	14	......	7	......	......	......	28	......
3.00 but under 3.50	21	......	3	......	......	......	57	......
2.50 but under 3.00	7	......	5	......	......	......	40	......
2.00 but under 2.50	16	......	......	......	......	......	7	......
1.50 but under 2.00	......	......	5	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	361	......	23	......	482	......	255	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

BEVERAGES (NOT SPIRITUOUS—SOFT DRINKS) (18 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	2				1			
20.00 but under $25.00	1				2			
18.00 but under 20.00	15				11			
15.00 but under 18.00	13				5			
13.00 but under 15.00	12				16			
12.00 but under 13.00	13				23			
11.00 but under 12.00	18				10			
10.00 but under 11.00	18				20			
9.00 but under 10.00	31				28			
8.00 but under 9.00	11	1			3	1		
7.00 but under 8.00	31	3			34			
6.00 but under 7.00	120	38			11			
5.50 but under 6.00	4	9						
5.00 but under 5.50	70	32	63	27	7			
4.50 but under 5.00	67	35	61	52	2	2	5	
4.00 but under 4.50	34	26	48	25			9	4
3.50 but under 4.00	7	10	41	45	4		5	
3.00 but under 3.50		8	6	7			11	
2.50 but under 3.00		3	16	8			1	
2.00 but under 2.50		2	7	9			1	
1.50 but under 2.00							3	
Under $1.50								
Totals	467	167	242	173	177	3	35	4

BICYCLES, TRICYCLES, ETC. (7 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	13				18			
20.00 but under $25.00	13				35			
18.00 but under 20.00	27				61			
15.00 but under 18.00	86				80			
13.00 but under 15.00	37				76			
12.00 but under 13.00	96				78			
11.00 but under 12.00	7				29			
10.00 but under 11.00	108				54			
9.00 but under 10.00	169				91			
8.00 but under 9.00	27				45			
7.00 but under 8.00	95				69		9	
6.00 but under 7.00	93	1	5		51		18	
5.50 but under 6.00	8				15		10	
5.00 but under 5.50	14		14		14		22	
4.50 but under 5.00	2		12		8		26	
4.00 but under 4.50		1	10		5		14	
3.50 but under 4.00		2	11			2	24	
3.00 but under 3.50		3	20				21	
2.50 but under 3.00			11	5			16	3
2.00 but under 2.50			4				4	3
1.50 but under 2.00								
Under $1.50								
Totals	795	7	87	5	729	2	164	6

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

BOOTS AND SHOES (24 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	8	....	....	......	13	....	....	....
20.00 but under $25.00.......	37	....	....	......	34	....	....	....
18.00 but under 20.00.......	26	....	....	......	29	....	....	....
15.00 but under 18.00.......	75	....	....	......	79	....	....	....
13.00 but under 15.00.......	61	....	....	......	55	....	....	....
12.00 but under 13.00.......	65	....	....	......	90	....	....	....
11.00 but under 12.00.......	64	4	....	......	74	30	....	....
10.00 but under 11.00.......	69	13	....	......	75	16	....	....
9.00 but under 10.00.......	172	15	....	......	170	20	....	....
8.00 but under 9.00.......	106	20	....	......	112	20	....	....
7.00 but under 8.00.......	141	35	....	......	111	30	5	....
6.00 but under 7.00.......	115	86	....	......	111	82	8	2
5.50 but under 6.00.......	19	50	....	......	20	50	1	....
5.00 but under 5.50.......	43	106	3	......	36	106	....	3
4.50 but under 5.00.......	24	92	7	......	15	70	28	1
4.00 but under 4.50.......	31	45	37	6	20	47	49	9
3.50 but under 4.00.......	10	52	16	22	3	55	21	32
3.00 but under 3.50.......	367	26	57	49	....	32	411	49
2.50 but under 3.00.......	14	9	19	38	....	3	21	28
2.00 but under 2.50.......	9	14	8	34	....	....	41	59
1.50 but under 2.00.......	11	1	2	15	....	....	....	8
Under $1.50	....	....	5	......	....	....	....	....
Totals	1,467	568	154	164	1,047	576	585	191

BOXES (WOODEN AND PAPER—29 ESTABLISHMENTS).

$25.00 per week and over...	8	....	....	......	7	....	....	....
20.00 but under $25.00.......	7	....	....	......	3	....	....	....
18.00 but under 20.00.......	13	....	....	......	13	....	....	....
15.00 but under 18.00.......	15	....	....	......	18	....	....	....
13.00 but under 15.00.......	16	....	....	......	26	....	....	....
12.00 but under 13.00.......	28	....	....	......	41	....	....	....
11.00 but under 12.00.......	25	....	....	......	29	....	....	....
10.00 but under 11.00.......	47	....	....	......	61	1	....	....
9.00 but under 10.00.......	96	1	....	......	114	....	....	....
8.00 but under 9.00.......	69	1	....	......	45	1	....	....
7.00 but under 8.00.......	79	1	....	......	140	....	....	....
6.00 but under 7.00.......	144	52	2	......	105	65	13	....
5.50 but under 6.00.......	16	16	7	6	41	11	8	3
5.00 but under 5.50.......	[illegible]	19	4	1	25	32	16	3
4.50 but under 5.00.......	33	29	6	1	37	36	7	4
4.00 but under 4.50.......	26	53	9	5	19	44	17	8
3.50 but under 4.00.......	24	20	13	18	9	43	14	20
3.00 but under 3.50.......	44	24	38	28	3	17	88	30
2.50 but under 3.00.......	28	28	38	48	....	25	80	47
2.00 but under 2.50.......	2	....	29	22	....	3	25	12
1.50 but under 2.00.......	....	....	....	3	....	6	....	8
Under $1.50	....	....	....	......	....	....	1	1
Total	761	244	146	127	736	284	269	136

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

BRICK, TILES AND SEWER PIPE (23 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	3	......	......	......	......	......	......	......
20.00 but under $25.00	......	......	......	......	......	......	......	......
18.00 but under 20.00	4	......	......	......	1	......	......	......
15.00 but under 18.00	4	......	......	......	1	......	......	......
13.00 but under 15.00	3	......	......	......	3	......	......	......
12.00 but under 13.00	7	......	......	......	2	......	......	......
11.00 but under 12.00	3	......	......	......	1	......	......	......
10.00 but under 11.00	50	......	......	......	5	......	......	......
9.00 but under 10.00	79	......	......	......	72	......	......	......
8.00 but under 9.00	110	......	......	......	124	......	......	......
7.00 but under 8.00	143	......	......	......	158	......	......	......
6.00 but under 7.00	153	......	3	......	182	......	......	......
5.50 but under 6.00	......	......	......	......	8	......	......	......
5.00 but under 5.50	2	......	......	......	1	......	......	......
4.50 but under 5.00	3	......	54	......	1	......	13	......
4.00 but under 4.50	......	......	......	......	3	......	......	......
3.50 but under 4.00	3	......	12	......	......	......	......	......
3.00 but under 3.50	8	......	20	......	8	......	7	......
2.50 but under 3.00	......	......	......	......	......	......	5	......
2.00 but under 2.50	2	......	1	......	......	......	8	......
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	577	......	90	......	570	......	33	......

BROOMS, BRUSHES AND BASKETS (19 ESTABLISHMENTS).

$25.00 per week and over	1	......	......	......	......	......	......	......
20.00 but under $25.00	1	......	......	......	......	......	......	......
18.00 but under 20.00	1	......	......	......	2	......	......	......
15.00 but under 18.00	1	......	......	......	1	......	......	......
13.00 but under 15.00	2	......	......	......	7	......	......	......
12.00 but under 13.00	14	......	......	......	9	......	......	......
11.00 but under 12.00	6	......	......	......	10	......	......	......
10.00 but under 11.00	6	......	......	......	10	......	......	......
9.00 but under 10.00	17	......	......	......	44	......	......	......
8.00 but under 9.00	31	......	......	......	23	......	......	......
7.00 but under 8.00	36	......	......	......	39	......	......	......
6.00 but under 7.00	43	......	......	......	31	2	2	......
5.50 but under 6.00	5	2	2	......	1	......	......	......
5.00 but under 5.50	3	......	......	......	13	......	3	......
4.50 but under 5.00	7	4	2	......	13	4	10	......
4.00 but under 4.50	1	......	3	......	2	......	......	......
3.50 but under 4.00	4	......	2	......	......	......	6	......
3.00 but under 3.50	1	......	24	......	......	......	12	......
2.50 but under 3.00	......	......	6	......	......	......	6	......
2.00 but under 2.50	......	......	1	......	......	......	16	......
1.50 but under 2.00	......	......	......	......	......	......	5	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	180	6	40	......	205	6	60	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

BURIAL CASES, CASKETS, COFFINS, ETC. (4 ESTABLISHMENTS).

Classification of weekly wages.	1896				1897			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age
$25.00 per week and over...	1	......	......	......	1	......	......	......
20.00 but under $25.00.......	1	......	......	......	......	......	......	......
18.00 but under 20.00.......	2	......	......	......	2	......	......	......
15.00 but under 18.00.......	6	......	......	......	5	......	......	......
13.00 but under 15.00.......	4	......	......	......	5	......	......	......
12.00 but under 13.00.......	16	......	......	......	13	......	......	......
11.00 but under 12.00.......	2	1	......	......	3	......	......	......
10.00 but under 11.00.......	5	......	......	......	16	......	......	......
9.00 but under 10.00.......	13	......	......	......	11	1	......	......
8.00 but under 9.00.......	35	......	......	......	81	1	......	......
7.00 but under 8.00.......	44	1	......	......	45	2	......	......
6.00 but under 7.00.......	62	4	......	......	57	4	......	......
5.50 but under 6.00.......	40	3	5	......	43	7	5	......
5.00 but under 5.50.......	1	2	......	......	4	4	......	......
4.50 but under 5.00.......	......	2	3	......	2	1	4	......
4.00 but under 4.50.......	......	7	2	......	4	7	1	1
3.50 but under 4.00.......	8	2	3	......	......	2	1	......
3.00 but under 3.50.......	......	20	10	......	......	20	2	9
2.50 but under 3.00.......	......	6	......	......	......	6	......	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	225	48	23	......	242	55	18	10

CEMENT, LIME, PLASTER, ETC. (12 ESTABLISHMENTS).

$25.00 per week and over...	3	......	......	......	1	......	......	......
20.00 but under $25.00.......	......	......	......	......	1	......	......	......
18.00 but under 20.00.......	1	......	......	......	1	......	......	......
15.00 but under 18.00.......	10	......	......	......	3	......	......	......
13.00 but under 15.00.......	8	......	......	......	10	......	......	......
12.00 but under 13.00.......	20	......	......	......	14	......	......	......
11.00 but under 12.00.......	1	......	......	......	3	......	......	......
10.00 but under 11.00.......	11	......	......	......	10	......	......	......
9.00 but under 10.00.......	90	......	......	......	58	......	......	......
8.00 but under 9.00.......	51	......	......	......	43	......	......	......
7.00 but under 8.00.......	117	......	......	......	224	......	......	......
6.00 but under 7.00.......	42	......	......	......	56	......	5	......
5.50 out under 6.00.......	......	......	......	......	1	......	......	......
5.00 but under 5.50.......	2	......	......	......	2	......	......	......
4.50 but under 5.00.......	4	......	......	......	4	......	......	......
4.00 but under 4.50.......	2	1	......	......	......	1	2	......
3.50 but under 4.00.......	1	......	......	......	......	......	......	......
3.00 but under 3.50.......	2	......	......	......	......	......	4	......
2.50 but under 3.00.......	......	......	......	......	......	......	7	......
2.00 but under 2.50.......	......	1	......	......	......	1	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	365	2	......	......	431	2	18	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

CHAIRS (13 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	20	......	......	......	9	......	......	......
20.00 but under $25.00	10	......	......	......	9	......	......	......
18.00 but under 20.00	24	......	......	......	20	......	......	......
12.00 but under 18.00	23	......	......	......	18	......	......	......
13.00 but under 15.00	51	......	......	......	39	......	......	......
12.00 but under 13.00	69	......	......	......	41	......	......	......
11.00 but under 12.00	11	......	......	......	43	......	......	......
10.00 but under 11.00	59	......	......	......	99	......	......	......
9.00 but under 10.00	125	......	......	......	133	1	......	......
8.00 but under 9.00	142	......	......	......	225	......	......	......
7.00 but under 8.00	666	38	35	......	590	1	25	......
6.00 but under 7.00	753	2	......	......	991	1	......	......
5.50 but under 6.00	157	9	55	10	121	7	45	......
5.00 but under 5.50	11	6	2	......	16	6	22	10
4.50 but under 5.00	90	8	35	......	112	35	63	1
4.00 but under 4.50	22	10	6	15	1	21	67	......
3.50 but under 4.00	79	35	39	3	2	49	99	23
3.00 but under 3.50	9	72	26	25	3	40	124	41
2.50 but under 3.00	......	......	......	......	......	2	69	29
2.00 but under 2.50	......	......	......	......	......	......	32	25
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	2,321	180	198	53	2,472	163	546	129

CHEMICAL PREPARATIONS (13 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	20	......	......	......	16	......	......	......
20.00 but under $25.00	4	......	......	......	5	......	......	......
18.00 but under 20.00	6	......	......	......	16	......	......	......
15.00 but under 18.00	7	......	......	......	5	......	......	......
13.00 but under 15.00	15	......	......	......	15	......	......	......
12.00 but under 13.00	6	......	......	......	6	......	......	......
11.00 but under 12.00	3	......	......	......	2	......	......	......
10.00 but under 11.00	11	......	......	......	11	......	......	......
9.00 but under 10.00	6	2	......	......	7	2	......	......
8.00 but under 9.00	5	......	......	......	3	......	......	......
7.00 but under 8.00	4	1	......	......	5	1	......	......
6.00 but under 7.00	8	1	2	4	10	1	......	......
5.50 but under 6.00	2	......	......	......	6	4	......	......
5.00 but under 5.50	7	4	......	......	3	2	......	......
4.50 but under 5.00	......	1	......	......	3	7	......	......
4.00 but under 4.50	2	1	......	......	2	9	......	......
3.50 but under 4.00	......	1	......	......	3	......	2	......
3.00 but under 3.50	......	11	1	......	......	3	......	......
2.50 but under 3.00	......	1	......	2	......	1	2	2
2.00 but under 2.50	......	......	......	1	......	......	......	1
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	106	23	3	7	118	30	4	3

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

CIGARS, SNUFF AND TOBACCO (54 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	13	......	......	......	9	......	......	......
20.00 but under $25.00.......	7	......	......	......	7	......	......	......
18.00 but under 20.00.......	26	......	......	......	8	......	......	......
15.00 but under 18.00.......	62	......	......	......	51	......	......	......
13.00 but under 15.00.......	42	......	......	......	48	......	......	......
12.00 but under 13.00.......	61	......	......	......	63	......	......	......
11.00 but under 12.00.......	54	1	......	......	64	......	......	......
10.00 but under 11.00.......	85	6	2	18	69	5	......	......
9.00 but under 10.00.......	104	9	......	......	88	11	......	......
8.00 but under 9.00.......	47	13	......	......	53	......	......	......
7.00 but under 8.00.......	52	21	5	......	54	23	6	......
6.00 but under 7.00.......	23	17	......	5	43	30	1	5
5.50 but under 6.00.......	5	6	3	4	5	3	......	5
5.00 but under 5.50.......	22	14	2	3	8	2	......	9
4.50 but under 5.00.......	13	3	6	1	8	4	6	3
4.00 but under 4.50.......	8	14	2	4	7	8	14	6
3.50 but under 4.00.......	3	5	8	4	......	7	3	6
3.00 but under 3.50.......	6	33	13	14	1	13	31	27
2.50 but under 3.00.......	4	19	16	5	......	18	24	49
2.00 but under 2.50.......	7	8	18	20	......	......	25	19
1.50 but under 2.00.......	......	......	5	19	......	......	......	28
Under $1.50	......	......	......	......	......	......	......	......
Total	644	169	80	79	586	124	110	157

CLOTHING (25 ESTABLISHMENTS).

$25.00 per week and over...	30	......	......	......	34	......	......	......
20.00 but under $25.00.......	30	......	......	......	14	......	......	......
18.00 but under 20.00.......	26	......	......	......	35	......	......	......
15.00 but under 18.00.......	25	......	......	......	32	......	......	......
13.00 but under 15.00.......	27	......	......	......	27	......	......	......
12.00 but under 13.00.......	26	......	......	......	35	......	......	......
11.00 but under 12.00.......	20	......	......	......	12	31	......	......
10.00 but under 11.00.......	28	5	......	......	28	16	......	......
9.00 but under 10.00.......	12	24	......	......	31	12	......	......
8.00 but under 9.00.......	12	20	......	......	19	72	......	......
7.00 but under 8.00.......	12	48	......	......	20	87	......	......
6.00 but under 7.00.......	12	110	......	1	17	123	......	......
5.50 but under 6.00.......	3	130	......	......	8	131	......	......
5.00 but under 5.50.......	1	534	......	......	8	117	......	1
4.50 but under 5.00.......	40	74	7	......	4	137	2	1
4.00 but under 4.50:......	1	118	......	......	2	107	3	5
3.50 but under 4.00.......	2	213	4	18	1	237	2	13
3.00 but under 3.50.......	7	86	5	8	1	112	13	7
2.50 but under 3.00.......	6	57	1	27	......	35	10	28
2.00 but under 2.50.......	......	52	5	14	......	44	6	20
1.50 but under 2.00.......	......	18	2	2	......	29	1	15
Under $1.50	......	......	......	......	......	1	......	17
Total	333	1,489	24	70	328	1,291	37	107

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

COAL AND WOOD (28 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	4	......	......	......	79	......	......	......
20.00 but under $25.00.......	18	......	......	......	184	......	......	......
18.00 but under 20.00.......	56	......	......	......	40	......	......	......
15.00 but under 18.00.......	30	......	......	......	90	......	......	......
13.00 but under 15.00.......	42	......	......	......	44	......	......	......
12.00 but under 13.00.......	41	......	......	......	237	......	......	......
11.00 but under 12.00.......	41	......	......	......	448	......	......	......
10.00 but under 11.00.......	576	......	......	......	284	......	......	......
9.00 but under 10.00.......	336	......	......	......	673	......	......	......
8.00 but under 9.00.......	97	2	......	......	112	......	......	......
7.00 but under 8.00.......	130	......	2	......	128	......	......	......
6.00 but under 7.00.......	43	2	7	......	42	......	......	......
5.50 but under 6.00.......	79	......	......	......	4	1	......	......
5.00 but under 5.50.......	......	......	......	......	1	......	......	......
4.50 but under 5.00.......	......	......	1	......	3	2	......	......
4.00 but under 4.50.......	......	......	1	......	6	......	......	......
3.50 but under 4.00.......	......	......	......	......	2	......	1	......
3.00 but under 3.50.......	......	......	1	......	1	......	1	......
2.50 but under 3.00.......	......	......	......	......	......	......	......	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	8	......
Under $1.50	......	......	......	......	......	......	......	......
Total	1,493	4	12	......	2,378	3	10	......

CONFECTIONERY, CRACKERS, ETC. (12 ESTABLISHMENTS).

$25.00 per week and over...	8	......	......	......	8	......	......	......
20.00 but under $25.00.......	13	......	......	......	12	......	......	......
18.00 but under 20.00.......	8	......	......	......	10	......	......	......
15.00 but under 18.00.......	15	......	......	......	13	......	......	......
13.00 but under 15.00.......	13	......	......	......	17	......	......	......
12.00 but under 13.00.......	33	......	......	......	23	......	......	......
11.00 but under 12.00.......	12	......	......	......	12	......	......	......
10.00 but under 11.00.......	38	......	......	......	34	......	......	......
9.00 but under 10.00.......	29	......	......	......	23	......	......	......
8.00 but under 9.00.......	14	1	......	......	17	......	......	......
7.00 but under 8.00.......	12	......	......	......	14	1	......	......
6.00 but under 7.00.......	14	1	......	......	20	3	......	......
5.50 but under 6.00.......	8	2	......	......	2	3	......	......
5.00 but under 5.50.......	15	5	1	......	14	9	1	......
4.50 but under 5.00.......	5	11	......	......	7	17	......	......
4.00 but under 4.50.......	15	23	3	......	12	25	13	1
3.50 but under 4.00.......	8	49	16	......	6	31	20	9
3.00 but under 3.50.......	5	38	17	21	18	33	12	34
2.50 but under 3.00.......	3	43	20	57	......	54	35	72
2.00 but under 2.50.......	......	6	25	36	......	3	6	90
1.50 but under 2.00.......	......	10	12	35	......	......	3	72
Under $1.50	......	......	......	2	......	......	......	......
Total	268	189	94	151	262	179	90	278

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

COOKING AND HEATING APPARATUS (24 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	15				8			
20.00 but under $25.00	6				9			
18.00 but under 20.00	30				28			
15.00 but under 18.00	89				103			
13.00 but under 15.00	56				70			
12.00 but under 13.00	80				90			
11.00 but under 12.00	45				38			
10.00 but under 11.00	78				82			
9.00 but under 10.00	112				144			
8.00 but under 9.00	112	2			133			
7.00 but under 8.00	142	2			185	1	2	
6.00 but under 7.00	86	1	3		113	1	1	
5.50 but under 6.00	11		1		22			
5.00 but under 5.50	13		5		25			
4.50 but under 5.00	17		14		22		11	
4.00 but under 4.50	3		24		9		26	
3.50 but under 4.00	1	5	24		7	5	18	
3.00 but under 3.50	9	1	48		9	1	54	
2.50 but under 3.00			82				81	
2.00 but under 2.50			100				104	
1.50 but under 2.00							3	
Under $1.50								
Total	905	11	301		1,097	8	300	

COOPERAGE (21 ESTABLISHMENTS).

$25.00 per week and over	3				3			
20.00 but under $25.00	8				8			
18.00 but under 20.00	11				10			
15.00 but under 18.00	25				29			
13.00 but under 15.00	21				53			
12.00 but under 13.00	63				36			
11.00 but under 12.00	50				29			
10.00 but under 11.00	70				88			
9.00 but under 10.00	117				97			
8.00 but under 9.00	58				63			
7.00 but under 8.00	78				73			
6.00 but under 7.00	85		8		77		4	
5.50 but under 6.00	9				34			
5.00 but under 5.50	25		2		11			
4.50 but under 5.00	12		12		11		23	
4.00 but under 4.50	2				10		12	
3.50 but under 4.00	17		3		4		18	
3.00 but under 3.50			8		1		12	
2.50 but under 3.00			2				2	
2.00 but under 2.50								
1.50 but under 2.00								
Under $1.50								
Total	654		35		637		71	

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

COTTON AND LINEN GOODS (5 ESTABLISHMENTS).

Classification of weekly wages	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	......	......	......	......	5	......	......	......
20.00 but under $25.00.......	......	......	......	......	......	......	......	......
18.00 but under 20.00.......	......	......	......	......	1	......	......	......
15.00 but under 18.00.......	2	......	......	......	4	......	......	......
13.00 but under 15.00.......	4	......	......	......	7	......	......	......
12.00 but under 13.00.......	12	......	......	......	6	......	......	......
11.00 but under 12.00.......	5	1	......	......	2	......	......	......
10.00 but under 11.00.......	2	1	......	......	4	1	......	......
9.00 but under 10.00.......	10	......	......	......	8	......	......	......
8.00 but under 9.00.......	15	4	......	......	24	4	......	......
7.00 but under 8.00.......	8	26	......	......	7	15	......	......
6.00 but under 7.00.......	36	29	......	......	28	48	......	......
5.50 but under 6.00.......	24	34	......	......	35	33	......	......
5.00 but under 5.50.......	26	37	......	......	22	14	3	......
4.50 but under 5.00.......	13	8	......	......	20	13	2	1
4.00 but under 4.50.......	18	59	24	20	22	67	26	20
3.50 but under 4.00.......	9	47	8	10	2	6	11	14
3.00 but under 3.50.......	5	41	20	17	10	32	30	16
2.50 but under 3.00.......	......	8	36	5	......	......	22	11
2.00 but under 2.50.......	......	1	3	2	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	4	......	4
Under $1.50	......	......	......	......	......	......	......	......
Totals	189	296	91	54	207	237	94	66

ELECTRICAL AND GAS APPARATUS AND SUPPLIES (21 ESTABLISHMENTS).

$25.00 per week and over....	19	......	......	......	14	......	......	......
20.00 but under $25.00.......	21	......	......	......	28	......	......	......
18.00 but under 20.00.......	39	......	......	......	33	......	......	......
15.00 but under 18.00.......	71	......	......	......	67	......	......	......
13.00 but under 15.00.......	82	......	......	......	85	......	......	......
12.00 but under 13.00.......	103	......	......	......	101	......	......	......
11.00 but under 12.00.......	47	......	......	......	66	......	......	......
10.00 but under 11.00.......	74	......	......	......	94	......	......	......
9.00 but under 10.00.......	145	......	......	......	175	......	......	......
8.00 but under 9.00.......	55	......	......	......	53	......	......	......
7.00 but under 8.00.......	81	1	......	......	92	......	......	......
6.00 but under 7.00.......	27	1	8	......	38	7	1	......
5.50 but under 6.00.......	6	......	3	7	11	......	......	......
5.00 but under 5.50.......	12	4	8	......	28	3	10	......
4.50 but under 5.00.......	8	5	8	2	11	52	11	5
4.00 but under 4.50.......	10	8	41	3	13	7	16	......
3.50 but under 4.00.......	16	3	6	3	5	3	29	......
3.00 but under 3.50.......	18	5	9	7	5	2	35	......
2.50 but under 3.00.......	8	......	4	2	......	......	20	2
2.00 but under 2.50.......	7	......	7	......	......	......	8	1
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	849	27	94	24	919	74	130	8

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

ELECTRIC AND GAS LIGHTING, POWER AND STREET RAILWAYS (49 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	18				14			
20.00 but under $25.00	29				29			
18.00 but under 20.00	30				76			
15.00 but under 18.00	146				122			
13.00 but under 15.00	80				54			
12.00 but under 13.00	813				776			
11.00 but under 12.00	58	1			51			
10.00 but under 11.00	175				225			
9.00 but under 10.00	277				85			
8.00 but under 9.00	63				77			
7.00 but under 8.00	295	2	2		131			
6.00 but under 7.00	15				95	1		
5.50 but under 6.00	1	1		7	269			
5.00 but under 5.50	3				67	3	1	
4.50 but under 5.00					8			
4.00 but under 4.50					13			
3.50 but under 4.00	4	2			1		2	
3.00 but under 3.50	14	1	7	7		1		
2.50 but under 3.00			3					
2.00 but under 2.50			3	3				
1.50 but under 2.00			3					
Under $1.50								
Totals	2,021	7	18	17	2,093	5	3	

FANCY ARTICLES (8 ESTABLISHMENTS).

$25.00 per week and over	1							
20.00 but under $25.00	3				1			
18.00 but under 20.00	5				6			
15.00 but under 18.00	6				5			
13.00 but under 15.00	5				4			
12.00 but under 13.00	3				2			
11.00 but under 12.00	2				3			
10.00 but under 11.00	12				15			
9.00 but under 10.00	9	2			16	1		
8.00 but under 9.00	11				13			
7.00 but under 8.00	11		1		29		1	
6.00 but under 7.00	11		7	2	19		2	
5.50 but under 6.00	11			1	5	1		
5.00 but under 5.50	1				4		1	
4.50 but under 5.00	3		1		2			
4.00 but under 4.50			2	1	1	2	1	
3.50 but under 4.00	3		1	5	1	3	2	
3.00 but under 3.50		12	2	3		19	8	5
2.50 but under 3.00		9	7			9	3	
2.00 but under 2.50		1	3			1	2	3
1.50 but under 2.00								
Under $1.50								
Totals	97	24	24	12	126	36	20	8

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

FLOUR AND FEED (86 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over....	28	......	......	......	15	......	......	......
20.00 but under $25.00.......	19	......	......	......	10	......	......	......
18.00 but under 20.00.......	29	......	......	......	14	......	......	......
15.00 but under 18.00.......	93	......	......	......	82	......	......	......
13.00 but under 15.00.......	76	......	......	......	64	......	......	......
12.00 but under 13.00.......	95	......	......	......	80	......	......	......
11.00 but under 12.00.......	56	......	......	......	42	......	......	......
10.00 but under 11.00.......	215	......	......	......	220	......	......	......
9.00 but under 10.00.......	238	1	......	......	290	1	......	......
8.00 but under 9.00.......	104	1	......	......	108	2	......	......
7.00 but under 8.00.......	114	......	......	......	122	......	......	......
6.00 but under 7.00.......	49	1	1	......	61	......	1	......
5.50 but under 6.00.......	5	......	......	......	5	......	......	......
5.00 but under 5.50.......	8	......	1	......	7	......	3	......
4.50 but under 5.00.......	4	......	1	......	5	......	1	......
4.00 but under 4.50.......	......	2	......	......	1	......	......	......
3.50 but under 4.00.......	1	2	......	......	......	1	1	1
3.00 but under 3.50.......	3	......	......	......	4	4	1	1
2.50 but under 3.00.......	......	......	......	......	......	1	......	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	1,137	7	3	......	1,130	9	7	2

FOOD PREPARATIONS (31 ESTABLISHMENTS).

$25.00 per week and over....	29	......	......	......	9	......	......	......
20.00 but under $25.00.......	62	......	......	......	27	......	......	......
18.00 but under 20.00.......	57	......	......	......	37	......	......	......
15.00 but under 18.00.......	64	......	......	......	53	......	......	......
13.00 but under 15.00.......	62	......	......	......	87	......	......	......
12.00 but under 13.00.......	150	......	......	......	125	......	......	......
11.00 but under 12.00.......	110	13	......	......	55	......	......	......
10.00 but under 11.00.......	109	......	......	......	115	......	......	......
9.00 but under 10.00.......	282	......	......	......	388	......	......	......
8.00 but under 9.00.......	191	1	......	......	122	......	......	......
7.00 but under 8.00.......	396	3	......	......	608	......	......	......
6.00 but under 7.00.......	181	40	13	......	125	1	15	......
5.50 but under 6.00.......	29	10	......	......	79	1	2	......
5.00 but under 5.50.......	74	34	64	25	113	3	4	......
4.50 but under 5.00.......	107	81	88	54	11	314	480	104
4.00 but under 4.50.......	39	26	51	25	16	280	107	103
3.50 but under 4.00.......	10	30	48	89	1	5	15	186
3.00 but under 3.50.......	1	7	40	69	......	7	21	98
2.50 but under 3.00.......	......	3	13	6	......	5	12	21
2.00 but under 2.50.......	......	3	9	8	......	5	11	16
1.50 but under 2.00.......	......	......	......	......	......	......	8	......
Under $1.50	......	......	......	......	......	......	2	......
Totals	1,953	251	326	276	1,971	621	677	523

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

FURNITURE (42 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over....	9	....	....	....	5	....	....	....
20.00 but under $25.00.......	8	....	....	....	3	....	....	....
18.00 but under 20.00.......	28	....	....	....	17	....	....	....
15.00 but under 18.00.......	56	....	....	....	36	....	....	....
13.00 but under 15.00.......	36	....	....	....	52	....	....	....
12.00 but under 13.00.......	99	....	....	....	84	....	....	....
11.00 but under 12.00.......	50	....	....	....	63	3	....	....
10.00 but under 11.00.......	127	1	....	....	148	1	....	....
9.00 but under 10.00.......	281	....	....	....	266	1	....	....
8.00 but under 9.00.......	227	1	....	....	225	....	....	....
7.00 but under 8.00.......	443	....	....	....	452	....	1	....
6.00 but under 7.00.......	541	9	....	....	650	7	24	....
5.50 but under 6.00.......	106	3	....	3	63	2	19	....
5.00 but under 5.50.......	57	5	6	3	53	1	39	3
4.50 but under 5.00.......	147	23	17	4	40	11	55	4
4.00 but under 4.50.......	20	4	24	4	13	6	30	4
3.50 but under 4.00.......	27	5	66	3	15	....	58	3
3.00 but under 3.50.......	23	10	86	4	1	6	14	5
2.50 but under 3.00.......	1	....	63	4	....	....	108	6
2.00 but under 2.50.......	6	....	28	4	....	....	75	4
1.50 but under 2.00.......	....	....	2	....	....	....	9	....
Under $1.50..................	....	....	....	....	....	....	....	2
Totals	2,292	61	292	29	2,186	38	432	31

FURS, GLOVES AND MITTENS (11 ESTABLISHMENTS).

$25.00 per week and over....	14	....	....	....	3	....	....	....
20.00 but under $25.00.......	1	....	....	....	....	....	....	....
18.00 but under 20.00.......	6	....	....	....	3	....	....	....
15.00 but under 18.00.......	2	....	....	....	5	....	....	....
13.00 but under 15.00.......	10	....	....	....	4	....	....	....
12.00 but under 13.00.......	6	....	....	....	14	....	....	....
11.00 but under 12.00.......	15	1	....	....	2	1	....	....
10.00 but under 11.00.......	13	10	....	....	17	8	....	....
9.00 but under 10.00.......	26	14	....	....	11	9	....	....
8.00 but under 9.00.......	2	....	....	....	7	6	....	....
7.00 but under 8.00.......	14	8	....	....	1	24	....	....
6.00 but under 7.00.......	6	24	....	....	16	21	....	....
5.50 but under 6.00.......	30	63	....	....	....	6	1	....
5.00 but under 5.50.......	....	9	....	....	9	18	....	....
4.50 but under 5.00.......	17	41	....	....	1	33	10	3
4.00 but under 4.50.......	6	23	10	10	....	20	....	....
3.50 but under 4.00.......	2	29	1	3	....	33	4	1
3.00 but under 3.50.......	2	3	....	4	....	7	....	9
2.50 but under 3.00.......	....	1	1	6	....	2	4	5
2.00 but under 2.50.......	....	....	1	....	....	4	....	....
1.50 but under 2.00.......	....	....	1	....	....	....	....	....
Under $1.50..................	....	....	....	....	....	....	....	....
Totals	172	226	14	23	93	192	19	18

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

GRAIN AND WAREHOUSE MEN (12 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over....	8	....	....	......	6	....	....	....
20.00 but under $25.00.......	1	....	....	......	....	....	....	....
18.00 but under 20.00.......	14	....	....	......	13	....	....	....
15.00 but under 18.00.......	12	....	....	......	22	....	....	....
13.00 but under 15.00.......	13	....	....	......	8	....	....	....
12.00 but under 13.00.......	9	....	....	......	15	....	....	....
11.00 but under 12.00.......	12	....	....	......	6	....	....	....
10.00 but under 11.00.......	49	....	....	......	112	....	....	....
9.00 but under 10.00.......	35	....	....	......	40	....	....	....
8.00 but under 9.00.......	5	....	....	......	5	....	....	....
7.00 but under 8.00.......	2	1	....	......	2	....	....	....
6.00 but under 7.00.......	....	....	....	......	....	....	....	....
5.50 but under 6.00.......	....	....	....	......	....	....	....	....
5.00 but under 5.50.......	....	....	....	......	....	....	....	....
4.50 but under 6.50.......	....	....	....	......	....	....	....	....
4.00 but under 4.50.......	....	....	....	......	....	....	....	....
3.50 but under 4.00.......	....	....	....	......	....	....	....	....
3.00 but under 3.50.......	....	....	....	......	....	....	....	....
2.50 but under 3.00.......	....	....	....	......	....	....	....	....
2.00 but under 2.50.......	....	....	....	......	....	....	....	....
1.50 but under 2.00.......	....	....	....	......	....	....	....	....
Under $1.50	....	....	....	......	....	....	....	....
Totals	160	1	....	......	229	....	....	....

IRON GOODS (MALLEABLE—25 ESTABLISHMENTS).

$25.00 per week and over....	133	....	....	......	86	....	....	....
20.00 but under $25.00.......	64	....	....	......	57	....	....	....
18.00 but under 20.00.......	96	....	....	......	63	....	....	....
15.00 but under 18.00.......	218	....	....	......	186	....	....	....
13.00 but under 15.00.......	208	....	....	......	161	....	....	....
12.00 but under 13.00.......	254	....	....	......	312	....	....	....
11.00 but under 12.00.......	159	....	....	......	186	....	....	....
10.00 but under 11.00.......	180	....	....	......	308	3	....	....
9.00 but under 10.00.......	360	....	....	......	382	....	....	....
8.00 but under 9.00.......	229	....	....	......	418	....	....	....
7.00 but under 8.00.......	387	....	3	......	673	9	1	....
6.00 but under 7.00.......	585	....	13	......	477	5	6	....
5.50 but under 6.00.......	58	....	19	......	78	....	22	....
5.00 but under 5.50.......	74	....	20	......	61	3	28	....
4.50 but under 5.00.......	9	....	52	......	63	....	71	....
4.00 but under 4.50.......	4	....	41	......	15	....	72	....
3.50 but under 4.00.......	1	....	78	......	1	....	110	....
3.00 but under 3.50.......	7	....	76	......	3	2	73	2
2.50 but under 3.00.......	....	....	8	......	....	....	4	....
2.00 but under 2.50.......	....	....	3	......	....	....	8	....
1.50 but under 2.00.......	....	....	....	......	....	....	6	....
Under $1.50	....	....	....	......	....	....	....	....
Totals	3,026	....	313	......	3,530	22	401	2

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

IRON (PIG—2 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	3	......	......	......	3	......	......	......
20.00 but under $25.00	3	......	......	......	......	......	......	......
18.00 but under 20.00	......	......	......	......	......	......	......	......
15.00 but under 18.00	5	......	......	......	2	......	......	......
13.00 but under 15.00	9	......	......	......	15	......	......	......
12.00 but under 13.00	13	......	......	......	10	......	......	......
11.00 but under 12.00	26	......	......	......	14	......	......	......
10.00 but under 11.00	12	......	......	......	9	......	......	......
9.00 but under 10.00	53	......	......	......	47	......	......	......
8.00 but under 9.00	2	......	......	......	35	......	......	......
7.00 but under 8.00	28	......	......	......	41	......	......	......
6.00 but under 7.00	......	......	......	......	......	......	......	......
5.50 but under 6.00	......	......	......	......	......	......	......	......
5.00 but under 5.50	......	......	......	......	......	......	......	......
4.50 but under 5.00	......	......	......	......	......	......	......	......
4.00 but under 4.50	......	......	......	......	......	......	......	......
3.50 but under 4.00	......	......	......	......	......	......	......	......
3.00 but under 3.50	......	......	......	......	......	......	......	......
2.50 but under 3.00	......	......	......	......	......	......	......	......
2.00 but under 2.50	......	......	......	......	......	......	......	......
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	154	......	......	......	176	......	......	......

KNIT GOODS (15 ESTABLISHMENTS).

$25.00 per week and over	16	......	......	......	8	......	......	......
20.00 but under $25.00	6	......	......	......	4	......	......	......
18.00 but under 20.00	6	......	......	......	9	......	......	......
15.00 but under 18.00	15	......	......	......	20	......	......	......
13.00 but under 15.00	9	......	......	......	5	......	......	......
12.00 but under 13.00	11	......	......	......	24	......	......	......
11.00 but under 12.00	2	......	......	......	3	......	......	......
10.00 but under 11.00	11	3	......	......	2	......	......	......
9.00 but under 10.00	29	......	......	......	6	5	......	......
8.00 but under 9.00	4	6	......	......	31	35	......	......
7.00 but under 8.00	37	14	......	......	1	13	41	59
6.00 but under 7.00	25	67	3	......	30	66	22	20
5.50 but under 6.00	12	96	3	......	1	27	3	......
5.00 but under 5.50	2	165	......	......	2	148	......	......
4.50 but under 5.00	2	133	26	......	2	134	28	3
4.00 but under 4.50	......	101	......	8	3	115	25	97
3.50 but under 4.00	......	124	40	103	1	140	10	50
3.00 but under 3.50	4	80	33	112	2	84	18	211
2.50 but under 3.00	......	18	10	190	......	48	1	129
2.00 but under 2.50	......	10	4	65	......	36	......	49
1.50 but under 2.00	......	......	......	......	......	12	2	54
Under $1.50	......	......	......	......	......	......	......	24
Totals	191	817	119	478	154	863	150	696

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

LAGER BEER (71 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over....	65	......	......	......	40	......	......	......
20.00 but under $25.00.......	195	......	......	......	40	......	......	......
18.00 but under 20.00.......	40	......	......	......	42	......	......	......
15.00 but under 18.00.......	551	......	......	......	680	......	......	......
13.00 but under 15.00.......	478	......	......	......	518	......	......	......
12.00 but under 13.00.......	385	......	......	......	331	......	......	......
11.00 but under 12.00.......	135	......	......	......	183	......	......	......
10.00 but under 11.00.......	215	......	......	......	219	......	......	......
9.00 but under 10.00.......	221	......	......	......	229	......	......	......
8.00 but under 9.00.......	99	......	......	......	73	......	......	......
7.00 but under 8.00.......	84	2	......	......	128	2	......	......
6.00 but under 7.00.......	87	2	......	......	65	7	2	......
5.50 but under 6.00.......	12	......	9	......	27	......	8	......
5.00 but under 5.50.......	29	4	6	3	17	2	11	......
4.50 but under 5.00.......	14	2	8	......	14	......	54	......
4.00 but under 4.50.......	10	68	18	......	19	72	58	......
3.50 but under 4.00.......	8	162	61	......	23	1	75	......
3.00 but under 3.50.......	7	24	49	53	......	11	50	22
2.50 but under 3.00.......	......	......	35	44	......	7	8	75
2.00 but under 2.50.......	......	......	......	56	......	21	52	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	3
Under $1.50	......	......	......	......	......	......	......	6
Totals	2,635	264	186	156	2,648	123	318	106

LAUNDRIES (75 ESTABLISHMENTS).

$25.00 per week and over....	2	......	......	......	......	......	......	......
20.00 but under $25.00.......	4	......	......	......	2	......	......	......
18.00 but under 20.00.......	5	......	......	......	3	......	......	......
15.00 but under 18.00.......	12	......	......	......	8	......	......	......
13.00 but under 15.00.......	15	......	......	......	17	......	......	......
12.00 but under 13.00.......	23	......	......	......	16	......	......	......
11.00 but under 12.00.......	6	1	......	......	16	6	......	......
10.00 but under 11.00.......	34	3	......	......	30	2	......	......
9.00 but under 10.00.......	28	9	......	......	22	12	......	......
8.00 but under 9.00.......	21	11	......	......	19	11	......	......
7.00 but under 8.00.......	16	16	......	......	18	27	......	......
6.00 but under 7.00.......	16	102	2	......	9	114	2	......
5.50 but under 6.00.......	7	53	......	3	8	39	1	......
5.00 but under 5.50.......	4	138	......	......	3	116	......	......
4.50 but under 5.00.......	......	52	......	......	1	48	1	1
4.00 but under 4.50.......	1	74	......	1	2	70	7	1
3.50 but under 4.00.......	1	47	1	3	5	63	2	5
3.00 but under 3.50.......	......	56	3	10	5	42	2	10
2.50 but under 3.00.......	......	8	4	10	......	16	9	9
2.00 but under 2.50.......	......	4	1	4	......	6	2	6
1.50 but under 2.00.......	......	1	1	1	......	1	1	......
Under $1.50	......	1	......	......	......	......	......	......
Totals	195	576	12	32	184	573	27	32

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

LEATHER (33 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	19	......	......	.....	18	......	......	......
20.00 but under $25.00.......	16	......	......	.....	25	......	......	......
18.00 but under 20.00.......	59	......	......	.....	29	......	......	......
15.00 but under 18.00.......	128	......	......	.....	97	......	......	......
13.00 but under 15.00.......	159	......	......	.....	177	......	......	......
12.00 but under 13.00.......	276	......	......	.....	232	......	......	......
11.00 but under 12.00.......	171	......	......	.....	200	......	......	......
10.00 but under 11.00.......	324	......	......	.....	212	......	......	......
9.00 but under 10.00.......	892	54	......	.....	900	......	......	......
8.00 but under 9.00.......	943	......	......	.....	1,191	2	......	......
7.00 but under 8.00.......	706	......	1	.....	870	2	......	......
6.00 but under 7.00.......	317	......	......	.....	305	25	35	......
5.50 but under 6.00.......	14	......	......	.....	33	25	10	......
5.00 but under 5.50.......	42	55	5	.....	55	46	9	......
4.50 but under 5.00.......	16	1	5	1	23	51	15	......
4.00 but under 4.50.......	20	......	44	1	35	......	32	......
3.50 but under 4.00.......	6	......	37	1	......	20	28	6
3.00 but under 3.50.......	20	3	48	.....	7	18	56	25
2.50 but under 3.00.......	8	5	12	1	......	......	27	11
2.00 but under 2.50.......	2	......	11	3	......	......	14	3
1.50 but under 2.00.......	......	1	......	1	......	......	......	1
Under $1.50	......	......	......	.....	......	......	......	......
Total	4,138	119	163	8	4,409	189	225	46

LITHOGRAPHING AND ENGRAVING (7 ESTABLISHMENTS).

$25.00 per week and over...	26	......	......	.....	24	......	......	......
20.00 but under $25.00.......	29	......	......	.....	23	......	......	......
18.00 but under 20.00.......	26	......	......	.....	33	......	......	......
15.00 but under 18.00.......	20	......	......	.....	21	......	......	......
13.00 but under 15.00.......	21	......	......	.....	24	......	......	......
12.00 but under 13.00.......	21	......	......	.....	26	......	......	......
11.00 but under 12.00.......	11	1	......	.....	10	......	......	......
10.00 but under 11.00.......	14	......	......	.....	8	......	......	......
9.00 but under 10.00.......	19	......	......	.....	16	......	......	......
8.00 but under 9.00:......	9	......	......	.....	13	......	......	......
7.00 but under 8.00.......	13	4	......	.....	25	1	......	......
6.00 but under 7.00.......	16	1	......	.....	26	1	......	......
5.50 but under 6.00.......	11	9	......	.....	20	......	......	......
5.00 but under 5.50.......	13	......	......	.....	11	3	......	......
4.50 but under 5.00.......	16	......	......	.....	9	2	1	......
4.00 but under 4.50.......	32	4	2	.....	12	1	2	1
3.50 but under 4.00.......	28	......	1	1	19	3	7	3
3.00 but under 3.50.......	37	3	7	.....	11	5	15	6
2.50 but under 3.00.......	10	14	21	.....	......	3	33	2
2.00 but under 2.50.......	......	3	......	3	......	......	11	1
1.50 but under 2.00.......	......	......	......	.....	......	......	......	......
Under $1.50	......	......	......	.....	......	......	......	......
Total	372	39	31	4	331	19	69	13

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

LUMBER, LATH AND SHINGLES (168 ESTABLISHMENTS).

Classification of weekly wages.	1896				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	221	......	......	......	226	......	......	......
20.00 but under $25.00	265	......	......	......	228	......	......	......
18.00 but under 20.00	201	......	......	......	178	......	......	......
15.00 but under 18.00	346	......	......	......	319	......	......	......
13.00 but under 15.00	378	......	......	......	381	......	......	......
12.00 but under 13.00	564	......	......	......	596	......	......	......
11.00 but under 12.00	284	2	......	......	436	......	......	......
10.00 but under 11.00	797	4	......	......	844	8	......	......
9.00 but under 10.00	2,470	1	......	......	2,856	2	......	......
8.00 but under 9.00	3,297	4	......	......	3,916	4	......	......
7.00 but under 8.00	5,515	6	16	......	4,494	10	16	2
6.00 but under 7.00	1,802	15	29	2	1,668	21	44	......
5.50 but under 6.00	181	35	35	......	139	......	38	......
5.00 but under 5.50	102	31	23	......	151	34	26	......
4.50 but under 5.00	97	9	83	4	175	5	130	......
4.00 but under 4.50	94	4	35	......	12	2	64	......
3.50 but under 4.00	21	8	51	......	13	......	92	......
3.00 but under 3.50	2	1	101	......	6	4	124	......
2.50 but under 3.00	......	2	79	3	......	7	65	4
2.00 but under 2.50	1	7	29	......	......	5	30	2
1.50 but under 2.00	......	1	......	......	......	......	2	......
Under $1.50	......	......	......	......	......	......	......	......
Total	16638	130	481	9	16639	102	631	8

MALT (20 ESTABLISHMENTS).

$25.00 per week and over	12	......	......	......	17	......	......	......
20.00 but under $25.00	10	......	......	......	5	......	......	......
18.00 but under 20.00	1	......	......	......	5	......	......	......
15.00 but under 18.00	17	......	......	......	17	......	......	......
13.00 but under 15.00	19	......	......	......	23	......	......	......
12.00 but under 13.00	66	......	......	......	80	......	......	......
11.00 but under 12.00	118	......	......	......	163	......	......	......
10.00 but under 11.00	137	......	......	......	65	......	......	......
9.00 but under 10.00	66	......	......	......	72	1	......	......
8.00 but under 9.00	51	......	......	......	63	......	......	......
7.00 but under 8.00	26	......	......	......	53	......	......	......
6.00 but under 7.00	2	......	1	......	2	......	......	......
5.50 but under 6.00	......	1	......	......	......	......	......	......
5.00 but under 5.50	......	......	......	......	......	1	......	......
4.50 but under 5.00	......	......	......	......	......	......	......	......
4.00 but under 4.50	......	......	......	......	......	......	......	......
3.50 but under 4.00	......	......	2	......	......	......	1	......
3.00 but under 3.50	......	......	......	......	......	......	......	......
2.50 but under 3.00	......	......	......	......	......	......	......	......
2.00 but under 2.50	......	......	......	......	......	......	......	......
1.50 but under 2.00	......	......	......	......	......	......	1	......
Under $1.50	......	......	......	......	......	......	......	......
Total	525	1	3	......	565	2	2	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

MACHINES AND MACHINERY (86 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	61				56			
20.00 but under $25.00	103				87			
18.00 but under 20.00	159				165			
15.00 but under 18.00	508				440			
13.00 but under 15.00	482				636			
12.00 but under 13.00	498				445			
11.00 but under 12.00	228	2			102	1		
10.00 but under 11.00	393	2			429	1		
9.00 but under 10.00	628	1			483	1		
8.00 but under 9.00	441	1			508			
7.00 but under 8.00	305		1		504		1	
6.00 but under 7.00	190	3	3	2	191	6	3	
5.50 but under 6.00	30	1	8		35		5	
5.00 but under 5.50	45	3	7		41	5	18	
4.50 but under 5.00	56		27	2	46		33	
4.00 but under 4.50	17		19		11	3	54	
3.50 but under 4.00	29		33				48	
3.00 but under 3.50	40		65		2		103	
2.50 but under 3.00	4		6				12	
2.00 but under 2.50	6		7				17	1
1.50 but under 2.00							1	
Under $1.50								
Total	4,224	13	176	4	4,181	17	295	1

MIXED TEXTILES (9 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over								
20.00 but under $25.00								
18.00 but under 20.00	1				1			
15.00 but under 18.00	6				7			
13.00 but under 15.00	10				15			
12.00 but under 13.00	13				11			
11.00 but under 12.00	5							
10.00 but under 11.00	7				4	1		
9.00 but under 10.00	12	2			16	7		
8.00 but under 9.00	8	10			10	3		
7.00 but under 8.00	22	17			18	9		
6.00 but under 7.00	14	14		3	12	10		
5.50 but under 6.00		14			4			
5.00 but under 5.50	3	14	1		4	17	1	
4.50 but under 5.00	4	20	7		2	11	12	5
4.00 but under 4.50	2	21	12	10		25	5	10
3.50 but under 4.00		20	3	14		33	2	5
3.00 but under 3.50		18	10	22		41	11	13
2.50 but under 3.00			13	10		3	12	10
2.00 but under 2.50			4	10		2		14
1.50 but under 2.00			13			2	15	
Under $1.50						8		
Total	107	150	63	69	104	172	58	57

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

OFFICE AND SALOON FIXTURES, ETC. (15 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	3							
20.00 but under $25.00	3				2			
18.00 but under 20.00	2				6			
15.00 but under 18.00	19				22			
13.00 but under 15.00	35				42			
12.00 but under 13.00	56				59			
11.00 but under 12.00	40				46			
10.00 but under 11.00	82				51			
9.00 but under 10.00	152				128			
8.00 but under 9.00	89	1			78	1		
7.00 but under 8.00	99				109		1	
6.00 but under 7.00	23				26			
5.50 but under 6.00	16				12			
5.00 but under 5.50	7		1		11			
4.50 but under 5.00	9				14			
4.00 but under 4.50	11		4		1		8	
3.50 but under 4.00	13		4				1	
3.00 but under 3.50	7		26				38	
2.50 but under 3.00	3		2				10	
2.00 but under 2.50	3		1					2
1.50 but under 2.00								
Under $1.50								
Total	672	1	38		607	1	58	2

PAINTS, OILS AND CRUDE CHEMICALS (7 ESTABLISHMENTS).

$25.00 per week and over	5				6			
20.00 but under $25.00	3				3			
18.00 but under 20.00	2				9			
15.00 but under 18.00	3				1			
13.00 but under 15.00	3				3			
12.00 but under 13.00	11				11			
11.00 but under 12.00	9				10			
10.00 but under 11.00	17				16			
9.00 but under 10.00	28				31			
8.00 but under 9.00	16				18			
7.00 but under 8.00	18				15			
6.00 but under 7.00	11	1			5	1		
5.50 but under 6.00	2				1			
5.00 but under 5.50	1		2		5			
4.50 but under 5.00	1				6		1	
4.00 but under 4.50								
3.50 but under 4.00			2				4	
3.00 but under 3.50	1		2				3	
2.50 but under 3.00								
2.00 but under 2.50			1					
1.50 but under 2.00								
Under $1.50								
Totals	131	1	7		140	1	8	

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

PAPER AND PULP (34 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	15	......	......	......	11	......	......	......
20.00 but under $25.00.......	7	......	......	......	5	......	......	......
18.00 but under 20.00.......	79	......	......	......	82	......	......	......
15.00 but under 18.00.......	93	......	......	......	94	......	......	......
13.00 but under 15.00.......	66	......	......	......	82	......	......	......
12.00 but under 13.00.......	103	......	......	......	101	......	......	......
11.00 but under 12.00.......	28	......	......	......	46	......	......	......
10.00 but under 11.00.......	143	......	......	......	143	......	......	......
9.00 but under 10.00.......	577	......	......	......	641	......	......	......
8.00 but under 9.00.......	451	......	......	......	232	......	......	......
7.00 but under 8.00.......	526	2	......	......	861	8	......	1
6.00 but under 7.00.......	396	44	4	......	261	43	9	2
5.50 but under 6.00.......	42	12	19	......	22	6	......	......
5.00 but under 5.50.......	33	59	8	......	34	51	6	......
4.50 but under 5.00.......	60	362	27	10	21	263	42	23
4.00 but under 4.50.......	......	11	1	......	13	46	41	......
3.50 but under 4.00.......	4	19	1	1	......	3	94	......
3.00 but under 3.50.......	3	81	6	8	......	80	32	......
2.50 but under 3.00.......	......	......	......	......	......	......	......	1
2.00 but under 2.50.......	2	......	1	......	......	2	1	14
1.50 but under 2.00.......	......	2	......	......	......	......	......	......
Under $1.50	......	......	......	12	......	......	......	......
Totals	2,628	592	62	31	2,649	502	225	41

PRINTERS' SUPPLIES (4 ESTABLISHMENTS).

$25.00 per week and over...	......	......	......	......	2	......	......	......
20.00 but under $25.00.......	7	......	......	......	3	......	......	......
18.00 but under 20.00.......	5	......	......	......	4	......	......	......
15.00 but under 18.00.......	6	......	......	......	6	......	......	......
13.00 but under 15.00.......	2	......	......	......	2	......	......	......
12.00 but under 13.00.......	6	1	......	......	7	......	......	......
11.00 but under 12.00.......	10	......	......	......	......	1	......	......
10.00 but under 11.00.......	35	1	......	......	22	......	......	......
9.00 but under 10.00.......	11	......	......	......	25	1	......	......
8.00 but under 9.00.......	34	......	......	......	18	1	......	......
7.00 but under 8.00.......	......	......	......	......	29	3	......	......
6.00 but under 7.00.......	28	3	3	......	28	......	3	......
5.50 but under 6.00.......	......	......	......	......	......	......	......	......
5.00 but under 5.50.......	2	......	2	......	6	......	2	......
4.50 but under 5.00.......	5	......	......	......	4	......	......	......
4.00 but under 4.50.......	1	......	......	......	......	......	1	......
3.50 but under 4.00.......	1	......	10	......	......	......	10	......
3.00 but under 3.50.......	......	1	......	......	......	......	7	......
2.50 but under 3.00.......	......	......	......	6	......	......	6	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	1	......
Under $1.50	......	......	......	......	......	......	......	......
Total	158	6	15	6	156	6	30	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

RAILROAD EQUIPMENT (20 ESTABLISHMENTS).

Classification of weekly wages.	1896.				.897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	80	......	......	......	28	......	......	......
20.00 but under $25.00.......	322	......	......	......	625	......	......	......
18.00 but under 20.00.......	140	......	......	......	317	......	......	......
15.00 but under 18.00.......	473	......	......	......	362	......	......	......
13.00 but under 15.00.......	588	......	......	......	522	......	......	......
12.00 but under 13.00.......	463	......	......	......	1,641	......	......	......
11.00 but under 12.00.......	230	1	......	......	147	......	......	......
10.00 but under 11.00.......	626	......	......	......	572	......	......	......
9.00 but under 10.00.......	901	1	......	......	3,575	1	......	......
8.00 but under 9.00.......	535	......	......	......	486	......	......	......
7.00 but under 8.00.......	621	4	7	......	1,637	3	2	......
6.00 but under 7.00.......	164	1	3	......	114	......	6	......
5.50 but under 6.00.......	40	......	......	......	29	......	......	......
5.00 but under 5.50.......	15	......	2	......	14	......	......	......
4.50 but under 5.00.......	19	1	6	......	30	......	3	......
4.00 but under 4.50.......	2	......	......	......	1	......	......	......
3.50 but under 4.00.......	3	......	......	......	......	......	......	......
3.00 but under 3.50.......	......	......	......	......	......	......	......	......
2.50 but under 3.00.......	......	......	......	......	......	......	......	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Total	5,222	8	18	......	10100	4	11	......

SADDLERY, HARNESS, ETC. (9 ESTABLISHMENTS).

$25.00 per week and over...	1	......	......	......	1	......	......	......
20.00 but under $25.00.......	3	......	......	......	3	......	......	......
18.00 but under 20.00.......	4	......	......	......	6	......	......	......
15.00 but under 18.00.......	5	......	......	......	8	......	......	......
13.00 but under 15.00.......	7	......	......	......	3	......	......	......
12.00 but under 13.00.......	10	......	......	......	15	......	......	......
11.00 but under 12.00.......	4	......	......	......	7	......	......	......
10.00 but under 11.00.......	10	......	......	......	21	......	......	......
9.00 but under 10.00.......	20	......	......	......	30	......	......	......
8.00 but under 9.00.......	1	2	......	......	13	3	......	......
7.00 but under 8.00.......	13	1	......	......	15	......	......	......
6.00 but under 7.00.......	23	2	......	......	29	2	......	......
5.50 but under 6.00.......	3	5	......	......	9	7	......	......
5.00 but under 5.50.......	7	4	1	......	6	5	1	1
4.50 but under 5.00.......	1	2	......	......	1	3	......	......
4.00 but under 4.50.......	4	2	2	......	3	3	4	2
3.50 but under 4.00.......	1	......	8	......	......	......	7	4
3.00 but under 3.50.......	3	......	11	......	......	......	11	4
2.50 but under 3.00.......	......	......	5	......	......	......	2	5
2.00 but under 2.50.......	......	......	5	......	......	......	6	......
1.50 but under 2.00.......	......	......	1	......	......	......	2	......
Under $1.50	......	......	......	......	......	......	......	......
Total	120	18	33	......	170	23	33	16

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

SASH, DOORS, BLINDS AND MOULDING (73 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	11	......	......	......	7	......	......	......
20.00 but under $25.00.......	23	......	......	......	21	......	......	......
18.00 but under 20.00.......	36	......	......	......	36	......	......	......
15.00 but under 18.00.......	104	......	......	......	102	......	......	......
13.00 but under 15.00.......	133	......	......	......	121	......	......	......
12.00 but under 13.00.......	221	......	......	......	230	......	......	......
11.00 but under 12.00.......	39	1	......	......	59	......	......	......
10.00 but under 11.00.......	245	1	......	......	277	......	......	......
9.00 but under 10.00.......	420	......	......	......	415	1	......	......
8.00 but under 9.00.......	341	1	......	......	278	......	......	......
7.00 but under 8.00.......	492	5	4	......	492	......	......	......
6.00 but under 7.00.......	560	5	8	1	736	3	6	......
5.50 but under 6.00.......	104	......	21	......	33	......	......	......
5.00 but under 5.50.......	77	6	22	......	115	1	24	......
4.50 but under 5.00.......	35	......	38	......	100	......	87	......
4.00 but under 4.50.......	20	4	41	......	37	3	68	......
3.50 but under 4.00.......	15	10	46	......	34	10	99	......
3.00 but under 3.50.......	39	6	70	......	18	5	134	5
2.50 but under 3.00.......	26	......	58	......	......	......	115	1
2.00 but under 2.50.......	......	......	......	......	......	59	98	14
1.50 but under 2.00.......	......	......	......	......	......	......	8	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	2,941	39	308	1	3,111	82	639	20

SHEET METAL GOODS (26 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	13	......	......	......	9	......	......	......
20.00 but under $25.00.......	17	......	......	......	13	......	......	......
18.00 but under 20.00.......	21	......	......	......	13	......	......	......
15.00 but under 18.00.......	56	......	......	......	62	......	......	......
13.00 but under 15.00.......	74	......	......	......	34	......	......	......
12.00 but under 13.00.......	76	......	......	......	82	......	......	......
11.00 but under 12.00.......	63	......	......	......	29	......	......	......
10.00 but under 11.00.......	110	......	......	......	77	......	......	......
9.00 but under 10.00.......	187	1	......	......	118	......	......	......
8.00 but under 9.00.......	173	......	......	......	124	......	......	......
7.00 but under 8.00.......	99	......	......	......	97	......	......	......
6.00 but under 7.00.......	161	1	......	......	213	1	1	......
5.50 but under 6.00.......	120	1	......	......	103	......	5	......
5.00 but under 5.50.......	71	39	1	......	114	......	2	......
4.50 but under 5.00.......	36	65	15	......	103	5	17	......
4.00 but under 4.50.......	43	17	166	2	40	16	206	......
3.50 but under 4.00.......	21	9	74	112	19	13	262	12
3.00 but under 3.50.......	11	28	53	21	3	27	185	28
2.50 but under 3.00.......	......	......	58	30	......	......	90	15
2.00 but under 2.50.......	......	......	33	10	......	......	23	11
1.50 but under 2.00.......	......	......	4	12	......	......	3	......
Under $1.50	......	......	......	......	......	......	......	......
Total	1,302	164	404	187	1,253	62	794	66

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

SHIP AND BOAT BUILDING (6 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over...	7	......	......	......	2	......	......	......
20.00 but under $25.00.......	10	......	......	......	23	......	......	......
18.00 but under 20.00.......	14	......	......	......	8	......	......	......
15.00 but under 18.00.......	132	......	......	......	126	......	......	......
13.00 but under 15.00.......	115	......	......	......	52	......	......	......
12.00 but under 13.00.......	107	1	......	......	69	......	......	......
11.00 but under 12.00.......	107	......	......	......	......	......	......	......
10.00 but under 11.00.......	......	......	......	......	72	......	......	......
9.00 but under 10.00.......	340	......	......	......	191	......	......	......
8.00 but under 9.00.......	......	......	......	......	3	......	......	......
7.00 but under 8.00.......	54	......	......	......	74	......	......	......
6.00 but under 7.00.......	25	1	......	......	23	2	......	......
5.50 but under 6.00.......	1	1	......	......	2	......	......	......
5.00 but under 5.50.......	......	......	......	......	......	......	......	......
4.50 but under 5.00.......	......	......	6	......	2	......	......	......
4.00 but under 4.50.......	......	......	......	......	......	......	......	......
3.50 but under 4.00.......	......	......	......	......	......	......	2	......
3.00 but under 3.50.......	......	......	......	......	......	......	......	......
2.50 but under 3.00.......	......	......	......	......	......	1	1	......
2.00 but under 2.50.......	......	......	1	......	......	......	1	......
1.50 but under 2.00.......	......	......	......	......	......	......	1	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	912	3	7	......	647	3	5	......

SOAP, LYE AND POTASH (9 ESTABLISHMENTS).

$25.00 per week and over....	......	......	......	......	......	......	......	......
20.00 but under $25.00.......	......	......	......	......	......	......	......	......
18.00 but under 20.00.......	3	......	......	......	7	......	......	......
15.00 but under 18.00.......	6	......	......	......	4	......	......	......
13.00 but under 15.00.......	4	......	......	......	3	......	......	......
12.00 but under 13.00.......	7	......	......	......	5	......	......	......
11.00 but under 12.00.......	5	......	......	......	4	......	......	......
10.00 but under 11.00.......	7	......	......	......	10	......	......	......
9.00 but under 10.00.......	14	......	......	......	16	......	......	......
8.00 but under 9.00.......	15	......	......	......	15	......	......	......
7.00 but under 8.00.......	7	......	......	......	15	......	......	......
6.00 but under 7.00.......	10	......	......	1	10	......	1	......
5.50 but under 6.00.......	8	......	......	1	4	......	......	......
5.00 but under 5.50.......	......	2	......	......	2	2	......	......
4.50 but under 5.00.......	......	2	1	......	1	1	......	......
4.00 but under 4.50.......	2	3	4	......	2	4	3	......
3.50 but under 4.00.......	......	4	1	......	......	8	10	......
3.00 but under 3.50.......	......	8	3	2	......	1	18	5
2.50 but under 3.00.......	......	......	......	......	......	......	15	1
2.00 but under 2.50.......	......	18	......	......	......	2	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	88	37	9	4	108	18	47	6

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

STAVES AND HEADING (21 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over ...	......	......	......	......	......	......	......	......
20.00 but under $25.00.......	1	......	......	......	......	......	......	......
18.00 but under 20.00.......	2	......	......	......	4	......	......	......
15.00 but under 18.00.......	4	......	......	......	3	......	......	......
13.00 but under 15.00.......	4	......	......	......	6	......	......	......
12.00 but under 13.00.......	31	......	......	......	25	......	......	......
11.00 but under 12.00.......	22	......	......	......	3	......	......	......
10.00 but under 11.00.......	2	......	......	......	25	......	......	......
9.00 but under 10.00.......	35	......	......	......	72	......	......	......
8.00 but under 9.00.......	39	......	......	......	104	......	......	......
7.00 but under 8.00.......	198	......	1	......	275	......	3	......
6.00 but under 7.00.......	53	......	6	......	50	......	9	......
5.50 but under 6.00.......	8	......	9	......	7	......	12	......
5.00 but under 5.50.......	1	......	2	......	......	......	2	......
4.50 but under 5.00.......	9	......	11	......	8	......	17	......
4.00 but under 4.50.......	1	......	6	......	......	......	21	......
3.50 but under 4.00.......	......	......	14	......	......	......	32	......
3.00 but under 3.50.......	1	......	29	......	......	......	36	......
2.50 but under 3.00.......	......	1	......	......	......	......	1	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	411	1	78	......	582	......	133	......

STONE (GRANITE, MARBLE, ETC.—10 ESTABLISHMENTS).

$25.00 per week and over....	1	......	......	......	2	......	......	......
20.00 but under $25.00.......	19	......	......	......	19	......	......	......
18.00 but under 20.00.......	[illegible]	......	......	......	18	......	......	......
15.00 but under 18.00.......	13	......	......	......	10	......	......	......
13.00 but under 15.00.......	7	......	......	......	9	......	......	......
12.00 but under 13.00.......	29	......	......	......	32	......	......	......
11.00 but under 12.00.......	57	......	......	......	2	......	......	......
10.00 but under 11.00.......	16	......	......	......	43	......	......	......
9.00 but under 10.00.......	45	......	......	......	56	......	......	......
8.00 but under 9.00.......	1	......	......	......	4	......	......	......
7.00 but under 8.00.......	14	......	......	......	22	......	......	......
6.00 but under 7.00.......	8	......	......	......	2	......	......	......
5.50 but under 6.00.......	......	......	......	......	......	......	......	......
5.00 but under 5.50.......	5	......	......	......	2	......	......	......
4.50 but under 5.00.......	......	......	......	......	1	......	......	......
4.00 but under 4.50.......	......	......	......	......	......	......	......	......
3.50 but under 4.00.......	......	......	......	......	......	......	2	......
3.00 but under 3.50.......	2	......	......	......	......	......	......	......
2.50 but under 3.00.......	......	......	......	......	......	......	......	......
2.00 but under 2.50.......	......	......	......	......	......	......	......	......
1.50 but under 2.00.......	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	225	......	......	......	222	......	2	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

STRAW GOODS (5 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	3				3			
20.00 but under $25.00	5				3			
18.00 but under 20.00	4				3			
15.00 but under 18.00	12				8			
13.00 but under 15.00	8				5			
12.00 but under 13.00	26				20			
11.00 but under 12.00	3	6			3			
10.00 but under 11.00	13	6			11	5		
9.00 but under 10.00	36				6	13		
8.00 but under 9.00	29				35			
7.00 but under 8.00	81	4			72	4		
6.00 but under 7.00	50	10			52			
5.50 but under 6.00					15			
5.00 but under 5.50		21			15	29		
4.50 but under 5.00		140	10	2	12	110		
4.00 but under 4.50		57	6	2		41	1	
3.50 but under 4.00		95	4	13		30	7	7
3.00 but under 3.50		51	12	22		11	12	12
2.50 but under 3.00				3			7	
2.00 but under 2.50								12
1.50 but under 2.00								
Under $1.50								
Totals	270	390	32	42	263	243	27	31

TOYS AND GAMES (5 ESTABLISHMENTS).

$25.00 per week and over								
20.00 but under $25.00	1				3			
18.00 but under 20.00	2				3			
15.00 but under 18.00	3				2			
13.00 but under 15.00	5				6			
12.00 but under 13.00	7				8			
11.00 but under 12.00	5				6			
10.00 but under 11.00	6				7			
9.00 but under 10.00	15				15			
8.00 but under 9.00	14				8			
7.00 but under 8.00	23				20			
6.00 but under 7.00	19		6		31		4	
5.50 but under 6.00	2		9		1		5	
5.00 but under 5.50	9	1	4		8	1	3	
4.50 but under 5.00	7	1	4		10	1	4	
4.00 but under 4.50	5		10		4		8	
3.50 but under 4.00	2	5	7		18	4	10	
3.00 but under 3.50	12	4	10		3	3	9	
2.50 but under 3.00			14				19	
2.00 but under 2.50			10				13	
1.50 but under 2.00			10				10	
Under $1.50				24				24
Totals	137	11	84	24	153	9	85	24

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

TRUNKS, VALISES, ETC. (9 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	3	......	......	......	3	......	......	......
20.00 but under $25.00	......	......	......	......	......	......	......	......
18.00 but under 20.00	3	......	......	......	3	......	......	......
15.00 but under 18.00	9	......	......	......	9	......	......	......
13.00 but under 15.00	15	......	......	......	10	......	......	......
12.00 but under 13.00	25	......	......	......	24	......	......	......
11.00 but under 12.00	15	......	......	......	14	1	......	......
10.00 but under 11.00	42	......	......	......	29	......	......	......
9.00 but under 10.00	82	1	......	......	81	1	......	......
8.00 but under 9.00	65	......	......	......	57	......	......	......
7.00 but under 8.00	92	1	......	......	84	......	......	......
6.00 but under 7.00	54	1	2	......	73	1	2	......
5.50 but under 6.00	5	......	......	......	25	......	......	......
5.00 but under 5.50	36	1	5	2	26	2	......	......
4.50 but under 5.00	16	11	10	7	39	7	4	2
4.00 but under 4.50	22	7	18	......	36	17	23	......
3.50 but under 4.00	1	13	21	......	10	10	18	11
3.00 but under 3.50	......	......	24	......	5	2	21	......
2.50 but under 3.00	......	3	12	8	......	1	16	11
2.00 but under 2.50	......	......	6	4	......	2	13	2
1.50 but under 2.00	......	......	1	1	......	......	3	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	485	38	99	22	528	44	100	26

VENEER (9 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	1	......	......	......	1	......	......	......
20.00 but under $25.00	......	......	......	......	......	......	......	......
18.00 but under 20.00	......	......	......	......	......	......	......	......
15.00 but under 18.00	6	......	......	......	6	......	......	......
13.00 but under 15.00	3	......	......	......	6	......	......	......
12.00 but under 13.00	6	......	......	......	10	......	......	......
11.00 but under 12.00	11	......	......	......	13	......	......	......
10.00 but under 11.00	18	1	......	......	15	......	......	......
9.00 but under 10.00	47	......	......	......	18	......	......	......
8.00 but under 9.00	24	......	......	......	44	......	......	......
7.00 but under 8.00	55	......	......	......	125	......	......	......
6.00 but under 7.00	61	......	12	......	79	......	2	......
5.50 but under 6.00	9	......	......	......	4	......	......	......
5.00 but under 5.50	5	......	6	......	8	......	......	......
4.50 but under 5.00	4	......	5	......	5	......	10	......
4.00 but under 4.50	16	......	......	......	20	......	22	......
3.50 but under 4.00	......	......	28	......	......	......	37	......
3.00 but under 3.50	......	......	11	......	......	......	14	......
2.50 but under 3.00	......	......	8	......	......	......	6	......
2.00 but under 2.50	......	......	......	......	......	......	......	......
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	266	1	70	......	354	......	91	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

WAGONS, CARRIAGES AND SLEIGHS (53 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age
$25.00 per week and over	13	......	......	......	9	......	......	......
20.00 but under $25.00	21	......	......	......	24	......	......	......
18.00 but under 20.00	26	......	......	......	34	......	......	......
15.00 but under 18.00	99	......	......	......	120	......	......	......
13.00 but under 15.00	90	......	......	......	154	......	......	......
12.00 but under 13.00	199	......	......	......	425	......	......	......
11.00 but under 12.00	109	......	......	......	200	3	......	......
10.00 but under 11.00	166	......	......	......	398	6	......	......
9.00 but under 10.00	387	3	......	......	331	9	......	......
8.00 but undér 9.00	328	......	......	......	233	7	......	......
7.00 but under 8.00	453	4	1	......	284	2	5	......
6.00 but under 7.00	163	3	12	......	162	4	13	......
5.50 but under 6.00	51	1	......	......	35	1	1	......
5.00 but under 5.50	47	8	14	......	21	......	13	......
4.50 but under 5.00	25	11	26	......	19	......	36	......
4.00 but under 4.50	7	1	9	4	3	3	16	......
3.50 but under 4.00	22	5	22	......	......	4	12	......
3.00 but under 3.50	2	5	33	1	......	3	20	1
2.50 but under 3.00	......	1	9	2	......	......	9	......
2.00 but under 2.50	......	......	......	......	......	......	1	......
1.50 but under 2.00	......	......	2	......	......	......	1	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	2,208	42	128	7	2,452	42	127	1

WOODENWARE (11 ESTABLISHMENTS).

$25.00 per week and over	......	......	......	......	......	......	......	......
20.00 but under $25.00	11	......	......	......	3	......	......	......
18.00 but under 20.00	12	......	......	......	4	......	......	......
15.00 but under 18.00	3	......	......	......	12	......	......	......
13.00 but under 15.00	......	......	......	......	15	......	......	......
12.00 but under 13.00	30	......	......	......	11	......	......	......
11.00 but under 12.00	33	......	......	......	24	......	......	......
10.00 but under 11.00	112	......	......	......	69	......	......	......
9.00 but under 10.00	30	......	......	......	69	......	......	......
8.00 but under 9.00	524	......	......	......	326	......	......	......
7.00 but under 8.00	360	......	......	......	365	......	......	......
6.00 but under 7.00	266	2	......	......	152	......	......	......
5.50 but under 6.00	3	......	......	......	33	......	......	......
5.00 but under 5.50	42	......	2	......	15	......	4	......
4.50 but under 5.00	......	2	54	......	4	......	69	......
4.00 but under 4.50	5	1	5	......	2	......	6	......
3.50 but under 4.00	5	......	13	......	......	......	25	......
3.00 but under 3.50	3	......	50	......	......	......	44	......
2.50 but under 3.00	......	......	59	......	......	......	66	......
2.00 but under 2.50	2	......	4	......	......	......	12	......
1.50 but under 2.00	......	......	......	......	......	......	......	......
Under $1.50	......	......	......	......	......	......	......	......
Totals	1,441	5	187	......	1,104	......	226	......

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

WOOLEN AND WORSTED GOODS (17 ESTABLISHMENTS).

Classification of weekly wages.	1896.				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over	4	......	......	......	3	......	......	......
20.00 but under $25.00	7	......	......	......	9	......	......	......
18.00 but under 20.00	13	......	......	......	13	......	......	......
15.00 but under 18.00	16	......	......	......	14	......	......	......
13.00 but under 15.00	15	......	......	......	10	......	......	......
12.00 but under 13.00	24	......	......	......	22	......	......	......
11.00 but under 12.00	6	......	......	......	4	......	......	......
10.00 but under 11.00	37	8	......	......	30	......	......	......
9.00 but under 10.00	60	14	......	......	75	6	......	......
8.00 but under 9.00	18	11	......	......	28	18	......	......
7.00 but under 8.00	43	17	2	......	56	7	......	......
6.00 but under 7.00	101	46	4	1	102	47	......	1
5.50 but under 6.00	10	28	......	......	22	18	2	3
5.00 but under 5.50	9	34	3	4	6	35	1	......
4.50 but under 5.00	6	60	10	5	31	78	5	3
4.00 but under 4.50	6	66	3	2	13	73	4	5
3.50 but under 4.00	8	65	9	8	2	67	8	21
3.00 but under 3.50	1	105	10	32	2	122	27	80
2.50 but under 3.00	......	32	6	16	......	7	8	41
2.00 but under 2.50	1	7	12	15	......	3	14	29
1.50 but under 2.00	......	......	4	13	......	......	......	11
Under $1.50	......	......	......	......	......	......	......	......
Totals	385	493	63	96	442	481	69	194

MISCELLANEOUS.

$25.00 per week and over	3	......	......	......	2	......	......	......
20.00 but under $25.00	5	......	......	......	3	......	......	......
18.00 but under 20.00	2	......	......	......	3	......	......	......
15.00 but under 18.00	11	......	......	......	10	......	......	......
13.00 but under 15.00	8	......	......	......	8	......	......	......
12.00 but under 13.00	17	......	......	......	16	......	......	......
11.00 but under 12.00	11	......	......	......	7	......	......	......
10.00 but under 11.00	25	......	......	......	25	......	......	......
9.00 but under 10.00	24	......	......	......	32	......	......	......
8.00 but under 9.00	26	15	......	......	47	......	......	......
7.00 but under 8.00	38	6	......	......	20	11	......	......
6.00 but under 7.00	19	5	2	......	21	6	1	......
5.50 but under 6.00	2	3	......	......	2	3	......	......
5.00 but under 5.50	9	32	......	......	6	32	......	......
4.50 but under 5.00	4	14	4	......	4	14	3	......
4.00 but under 4.50	2	8	......	13	11	......	12	1
3.50 but under 4.00	......	14	......	8	12	......	7	......
3.00 but under 3.50	2	......	22	3	2	13	1	17
2.50 but under 3.00	10	11	2	9	......	10	2	9
2.00 but under 2.50	5	......	1	2	......	1	1	5
1.50 but under 2.00	......	......	......	......	......	......	......	2
Under $1.50	......	......	......	......	......	......	......	......
Totals	223	108	31	35	231	90	27	34

CLASSIFIED WEEKLY WAGES BY INDUSTRIES—Continued.

ALL INDUSTRIES (1,499 ESTABLISHMENTS).

Classification of weekly wages.	1896				1897.			
	Males 18 years of age and over.	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.	Males 18 years of age and over	Females 18 years of age and over.	Males under 18 years of age.	Females under 18 years of age.
$25.00 per week and over....	1,030	......	......	......	861	......	......	......
20.00 but under $25.00.......	1,533	......	......	......	1,674	......	......	......
18.00 but under 20.00.......	1,496	......	......	......	1,632	......	......	......
15.00 but under 18.00.......	3,990	......	......	......	3,860	......	......	......
13.00 but under 15.00.......	3,924	......	......	......	4,194	......	......	......
12.00 but under 13.00.......	5,819	1	......	......	7,156	......	......	......
11.00 but under 12.00.......	2,823	36	......	......	3,193	78	......	......
10.00 but under 11.00.......	5,948	65	......	......	6,117	74	......	......
9.00 but under 10.00.......	17,292	146	......	......	14,357	118	......	......
8.00 but under 9.00.......	9,380	129	......	......	10,321	202	......	......
7.00 but under 8.00.......	14,007	288	65	......	14,633	307	133	61
6.00 but under 7.00.......	8,526	763	212	23	7,878	738	293	30
5.50 but under 6.00.......	1,356	598	209	42	1,515	386	215	11
5.00 but under 5.50.......	1,190	1,460	324	71	1,244	821	304	24
4.50 but under 5.00.......	1,136	1,305	873	145	1,135	1,471	1,474	164
4.00 but under 4.50.......	603	866	746	161	477	1,145	1,231	278
3.50 but under 4.00.......	477	1,112	880	493	223	401	1,394	433
3.00 but under 3.50.......	776	875	1,230	530	135	823	2,051	772
2.50 but under 3.00.......	136	282	764	545	......	262	1,105	626
2.00 but under 2.50.......	73	137	389	326	......	201	676	403
1.50 but under 2.00.......	12	34	68	102	......	54	97	206
Under $1.50	......	1	6	88	......	9	3	74
Totals	81,527	8,098	5,766	2,476	80,605	7,090	8,976	3,082

PROPORTION OF BUSINESS DONE—BY INDUSTRIES.

1896 AND 1897.

The table below shows the average proportion of business done in different industries. Greatest capacity or maximum production has been considered as 100 per cent. The percentage given below indicate the proportion of business done on that basis. Comparison between the two years with the relative increase or decrease is noted.

Industries.	No. of establishments.	Average Proportion of Business Done.		Increase (+) or Decrease (−) in 1897.	
		1896.	1897.	Proportion.	Percentages.
Agricultural implements	31	72.50	70.20	— 02.30	— 3.16
Artisans' tools, hardware specialties	10	75.31	70.10	— 05.21	— 6.91
Beverages (not spirituous)	18	62.00	64.83	+ 02.83	+ 4.56
Bicycles, tricycles, etc	7	58.12	58.60	+ 00.48	+ 0.86
Boots and shoes	24	72.62	76.29	+ 03.76	+ 5.20
Boxes (wooden and paper)	29	57.15	78.19	+ 21.04	+ 36.81
Brick, tile and sewer pipe	23	50.47	49.75	— 00.72	— 1.42
Brooms and brushes, etc	19	67.88	68.95	+ 01.07	+ 1.57
Burial cases, caskets, coffins, etc	4	75.37	76.25	+ 00.88	+ 1.16
Cement, lime, plaster, etc	12	70.67	62.17	— 08.50	— 12.02
Chairs	13	70.59	71.92	+ 01.33	+ 1.88
Chemical preparations	13	70.00	71.25	+ 01.25	+ 1.78
Cigars, snuff and tobacco	54	75.30	79.04	+ 03.74	+ 4.96
Clothing	[illegible]	71.82	77.04	+ 05.22	+ 7.26
Coal and wood	28	75.57	77.61	+ 02.04	+ 2.70
Confectioneries, crackers, etc	12	73.84	76.50	+ 02.66	+ 3.60
Cooking and heating apparatus	24	60.40	64.76	+ 04.36	+ 7.21
Cooperage	21	71.35	64.24	— 07.11	— 9.96
Cotton and linen goods	5	75.78	81.40	+ 05.62	+ 7.41
Electrical and gas apparatus and supplies	21	85.69	72.86	— 12.83	— 14.97
Electrical and gas lighting power and street railways	49	70.00	71.73	+ 01.73	+ 2.46
Fancy articles	8	53.40	61.12	+ 07.72	+ 14.45
Flour and feed	86	70.37	75.27	+ 04.90	+ 6.96
Food preparations	31	64.30	67.00	+ 02.70	+ 4.20
Furniture	42	72.55	67.14	— 05.41	— 7.45
Furs, gloves and mittens	11	88.77	75.82	— 12.95	— 14.58
Grain and warehouse men	12	60.15	61.10	+ 00.95	+ 1.57
Iron goods (malleable)	25	65.38	68.30	+ 02.92	+ 4.46
Iron (pig)	2	57.00	55.50	— 01.50	— 2.63
Knit goods	15	62.69	71.20	+ 08.51	+ 13.57
Lager beer	71	61.35	64.34	+ 02.99	+ 4.87
Laundries	75	75.00	70.00	— 05.00	— 6.66
Leather	33	73.69	79.61	+ 05.92	+ 8.03
Lithographing and engraving	7	90.50	81.12	— 09.38	— 10.36
Lumber, lath and shingles	168	61.20	70.00	+ 08.80	+ 14.32
Malt	20	85.51	88.75	+ 03.24	+ 3.78
Machines and machinery	86	64.84	68.01	+ 03.17	+ 4.88
Mixed textiles	9	70.87	69.50	— 01.37	— 1.93
Office and saloon fixtures, etc	15	79.11	70.78	— 08.33	— 10.51
Paints, oils and crude chemicals	7	70.37	74.86	+ 04.49	+ 6.38
Paper and pulp	34	83.20	83.00	— 00.20	— 0.24
Printers' supplies	4	73.12	75.09	+ 01.97	+ 2.69
Saddlery, harness, etc	9	53.87	78.44	+ 24.57	+ 45.60
Sash, doors, blinds and mouldings	73	66.25	69.76	+ 03.51	+ 5.29
Sheet metal goods	26	70.12	75.00	+ 04.88	+ 6.95
Ship and boat building	6	90.37	64.67	— 25.70	— 28.43

PROPORTION OF BUSINESS—BY INDUSTRIES—Continued.

1896 AND 1897.

The table below shows the average proportion of business done in different industries. Greatest capacity or maximum production has been considered as 100 per cent. The percentage given below indicates the proportion of business done on that basis. Comparison between the two years with the relative increase or decrease is noted.

INDUSTRIES.	No of establishments	AVERAGE PROPORTION OF BUSINESS DONE.		INCREASE (+) OR DECREASE (−) IN 1897.	
		1896.	1897.	Proportion.	Percentages.
Soap, lye and potash	9	51.30	78.89	+ 27.59	+ 53.78
Staves and heading	21	62.42	74.38	+ 11.96	+ 19.15
Stone (granite, marble, etc.)	10	62.28	63.10	+ 00.82	+ 1.31
Straw goods	5	72.79	78.00	+ 05.21	+ 7.15
Toys and games	5	65.00	66.20	+ 01.20	+ 1.84
Trunks and valises	9	81.31	90.56	+ 09.25	+ 11.37
Veneer	9	65.20	77.56	+ 12.36	+ 18.95
Wagons, carriages and sleighs	53	56.75	71.80	+ 15.05	+ 26.51
Woodenware	11	88.30	76.70	— 11.60	— 13.13
Woolen and worsted goods	17	58.65	73.29	+ 14.64	+ 24.96
Miscellaneous	13	73.00	72.86	— 00.14	— 0.19
All industries	1,479	69.53	71.80	+ 2.27	+ 3.25

DAYS IN OPERATION—BY INDUSTRIES.

1896 AND 1897.

This table shows the average number of days in operation in each establishment in the industries considered. Comparison is made between the two years, and the increase or decrease is noted by number and percentages.

INDUSTRIES.	No. of establishme'ts	AVERAGE NUMBER OF DAYS IN OPERATION.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Days.	Per cent.
Agricultural implements	31	276.00	264.22	— 11.78	— 4.26
Artisans' tools and hardware specialties	10	288.78	267.20	— 21.58	— 7.65
Beverages (not spirituous, soft drinks)	18	269.96	271.19	+ 01.23	+ 0.45
Bicycles, tricycles, etc	7	236.00	265.71	+ 29.71	+ 12.58
Boots and shoes	24	262.40	275.12	+ 12.72	+ 4.84
Boxes (wooden and paper)	29	272.10	286.44	+ 14.34	+ 5.27
Brick, tile and sewer pipe	23	154.92	152.65	— 02.27	— 1.46
Brooms, brushes, etc	19	242.14	245.26	+ 03.12	+ 1.28
Burial cases, caskets, coffins, etc	4	268.00	275.25	+ 07.25	+ 2.70
Cement, lime, plaster, etc	12	275.95	253.92	— 22.03	— 7.98
Chairs	13	257.04	272.23	+ 15.19	+ 5.90
Chemical preparations	13	303.24	308.61	+ 05.37	+ 1.77
Cigars, snuff and tobacco	54	280.58	284.15	+ 03.57	+ 1.27
Clothing	25	270.78	283.24	+ 12.46	+ 4.60
Coal and wood	28	302.58	303.28	+ 00.70	+ 0.23
Confectioneries, crackers, etc	12	278.80	285.53	+ 06.73	+ 2.31
Cooking and heating apparatus	24	250.68	274.52	+ 23.84	+ 9.51
Cooperage	21	241.32	236.24	— 05.08	— 2.10
Cotton and linen goods	5	240.60	256.80	+ 16.20	+ 6.73
Electrical and gas apparatus and supplies	21	286.62	292.95	+ 06.33	+ 2.20
Electrical and gas lighting, power and street railways	49	358.84	361.21	+ 02.39	+ 0.66
Fancy articles	8	228.75	242.00	— 13.25	— 5.79
Flour and feed	86	263.66	271.42	+ 07.76	+ 2.94
Food preparations	31	230.72	238.26	+ 07.54	+ 3.26
Furniture	42	271.32	266.74	— 04.58	— 1.68
Furs, gloves and mittens	11	294.00	271.91	— 22.09	— 7.51
Grain and warehouse men	12	271.98	277.00	+ 05.02	+ 1.84
Iron goods (malleable)	25	278.74	281.22	+ 02.48	+ 0.88
Iron (pig)	2	204.00	191.00	— 13.00	— 6.37
Knit goods	15	266.57	284.00	+ 17.43	+ 6.54
Lager beer	71	301.37	300.97	— 00.40	— 0.13
Laundries	75	300.28	295.78	— 04.50	— 1.49
Leather	33	280.16	293.03	+ 12.87	+ 4.59
Lithographing and engraving	7	306.00	306.00	....	....
Lumber, lath and shingles	168	190.38	203.91	+ 13.53	+ 7.11
Malt	20	282.12	291.45	+ 09.33	+ 3.30
Machines and machinery	86	272.64	282.88	+ 10.24	+ 3.75
Mixed textiles	9	286.66	270.00	— 16.66	— 5.81
Office and saloon fixtures, etc	15	296.45	270.64	— 15.81	— 5.33
Paints, oils and crude chemicals	7	258.72	291.14	+ 32.44	+ 12.53
Paper and pulp	34	288.78	287.85	— 00.93	— 0.35
Printers' supplies	4	290.30	299.00	+ 08.70	+ 3.00
Railway construction and equipment	20	303.00	304.19	+ 01.19	+ 0.39
Saddlery, harness, etc	9	208.72	287.11	+ 83.39	+ 40.93
Sash, doors, blinds and moulding	73	248.02	257.14	+ 09.12	+ 3.67
Sheet metal goods	26	270.08	286.54	+ 16.46	+ 6.09
Ship and boat building	6	292.96	212.33	— 80.63	— 27.52
Soap, lye and potash	9	210.00	296.22	+ 86.22	+ 41.05

DAYS IN OPERATION—BY INDUSTRIES—Continued.

1896 AND 1897.

This table shows the average number of days in operation in each establishment in the industries considered. Comparison is made between the two years, and the increase or decrease is noted by number and percentages.

INDUSTRIES.	No. of establishments.	AVERAGE NUMBER OF DAYS IN OPERATION.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Days.	Per cent.
Staves and heading	21	199.50	230.76	+ 31.26	+ 15.66
Stone (granite, marble, etc)	10	247.72	251.20	+ 03.46	+ 1.39
Straw goods	5	247.60	244.40	— 03.20	— 1.29
Toys and games	5	240.50	245.60	+ 05.10	+ 2.12
Trunks, valises, etc	9	268.72	288.33	+ 19.61	+ 7.29
Veneer	9	240.96	263.89	+ 22.93	+ 9.51
Wagons, carriages and sleighs	53	241.42	287.35	+ 45.93	+ 19.02
Woodenware	11	277.71	266.50	— 11.21	— 4.04
Woolen and worsted goods	17	227.08	268.12	+ 41.04	+ 18.07
Miscellaneous	13	277.38	285.28	+ 07.90	+ 2.84
All industries	1,499	263.40	270.81	+ 7.41	+ 2.81

For the purpose of convenience, and to make them more distinct, we group all the facts relating to an industry together in one industry presentation. Such presentation is given to each of twelve of the more leading industries in the state; another for the twelve industries combined, and a final one for All Industries.

AGRICULTURAL IMPLEMENTS—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	31	31	....	....
Number of private firms	7	8	+ 1	+ 14.28
Number of partners	11	19	+ 8	+ 72.72
Males	11	19	+ 8	+ 72.72
Females	....	....	....	....
Number of corporations	24	23	— 1	— 4.16
Number of stockholders	200	236	+ 36	+ 28.00
Males	170	201	+ 31	+ 18.23
Females	30	35	+ 5	+ 16.66
Aggregates: Partners and stockholders....	211	255	+ 44	+ 20.85

Persons employed.

Average number	1,856	1,866	+ 10	+ 0.54
Smallest number	1,517	1,568	+ 51	+ 3.36
Greatest number	2,513	2,386	— 127	— 5.05
Excess of greatest over smallest..........	996	818	— 178	— 17.87

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested... ...	$6,247,280	$7,826,158	+ $1,578,878	+ 25.27

Stock used—aggregate values.

Total value of stock used........	$2,268,950	$2,174,798	—$94,152	— 4.15

Goods made—aggregate values.

Total value of goods made or work done	$4,529,474	$4,242,134	— $287,340	— 6.22

Persons employed—by months.

Months	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	2,481	1	2,482	1,864	1	1,865
February	2,488	1	2,489	2,146	1	2,147
March	2,512	1	2,513	2,199	1	2,200
April	2,256	1	2,257	1,999	1	2,000
May	1,925	1	1,926	1,793	1	1,794
June	1,823	1	1,824	1,749	1	1,750
July	1,785	1	1,786	1,716	1	1,717
August	1,556	1	1,557	1,590	1	1,591
September	1,668	1	1,669	1,567	1	1,568
October	1,516	1	1,517	1,685	1	1,686
November	1,636	1	1,637	1,877	1	1,878
December	1,812	1	1,813	2,191	1	2,192

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages	$999,822 00	$938,930 00	— $60,892 00	— 6.09
Average yearly earnings	538 70	503 18	— 35 52	— 6.59

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over	29	....	......	......	29	16	....	......	......	16
20.00 but under $25.00	71	....	......	......	71	17	....	......	......	17
18.00 but under 20.00	36	....	......	......	36	32	....	......	......	32
15.00 but under 18.00	127	....	......	......	127	98	....	......	......	98
13.00 but under 15.00	112	....	......	......	112	189	....	......	......	189
12.00 but under 13.00	285	....	......	......	285	225	....	......	......	225
11.00 but under 12.00	73	....	......	......	73	147	....	......	......	147
10.00 but under 11.00	136	....	......	......	136	142	....	......	......	142
9.00 but under 10.00	408	....	......	......	408	417	....	......	......	417
8.00 but under 9.00	102	....	......	......	102	195	....	......	......	195
7.00 but under 8.00	418	....	......	......	418	363	....	......	......	363
6.00 but under 7.00	261	....	5	1	267	164	1	62	......	227
5.50 but under 6.00	21	1	......	......	22	10	....	3	......	13
5.00 but under 5.50	11	....	1	......	12	9	....	14	......	23
4.50 but under 5.00	78	....	2	......	80	32	....	34	......	66
4.00 but under 4.50	19	....	3	......	22	1	....	14	......	15
3.50 but under 4.00	36	....	5	......	41	......	....	20	......	20
3.00 but under 3.50	27	....	5	......	32	1	....	19	......	20
2.50 but under 3.00	4	....	......	......	4	......	....	3	......	3
2.00 but under 2.50	2	....	3	1	6	......	....	2	......	2
1.50 but under 2.00	1	....	......	......	1	......	....	......	......	......
Under $1.50	......	....	1	......	1	......	....	......	......	......
Totals	2,257	1	25	2	2,285	2,058	1	171	......	2,230

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	72.50	70.20	— 2.30	— 3.16
Average number of days in operation	276.00	264.22	— 11.78	— 4.26

BOOTS AND SHOES—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	24	24	....	....
Number of private firms	10	9	— 1	— 10.
Number of partners	18	15	— 3	— 16.66
Males	18	15	— 3	— 16.66
Females	....	....	....	....
Number of corporations	14	15	+ 1	+ 7.14
Number of stockholders	115	168	+ 53	+ 46.08
Males	108	151	+ 43	+ 39.81
Females	7	17	+ 10	+ 142.85
Aggregates: partners and stockholders	133	183	+ 50	+ 37.59

Persons employed.

Average number	2,239	2,299	+ 60	+ 2.67
Smallest number	2,012	2,186	+ 174	+ 8.64
Greatest number	2,435	2,457	+ 22	+ .90
Exess of greatest over smallest	423	271	— 152	— 35.93

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$1,955,624	$1,900,423	— $55,201	— 2.90

Stock used—aggregate values.

Total value of stock used	$1,742,081	$1,983,766	+ $241,685	+ 11.84

Goods made—aggregate values.

Total value of goods made or work done	$3,018,633	$3,416,422	+ $397,789	+ 13.17

Persons employed—by months.

Months	1896.			1897.		
	Male.	Female.	Total	Male.	Female.	Total.
January	1,608	773	2,381	1,618	779	2,397
February	1,633	747	2,380	1,630	810	2,440
March	1,580	780	2,360	1,590	793	2,383
April	1,549	746	2,295	1,593	775	2,368
May	1,516	728	2,244	1,575	743	2,318
June	1,498	711	2,209	1,506	714	2,220
July	1,486	686	2,172	1,507	686	2,193
August	1,507	666	2,173	1,547	719	2,266
September	1,484	688	2,172	1,534	719	2,253
October	1,524	690	2,214	1,548	700	2,248
November	1,389	623	2,012	1,501	685	2,186
December	1,538	699	2,237	1,568	743	2,311

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$622,611 00	$686,972 00	+ $64,361 00	+ 10.33
Average yearly earnings	278 07	298 81	+ 20 74	+ 7.46

Classified weekly earnings.

Classification o weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age	Total.
$25.00 per week and over..	8	....	......	......	8	13	....	......	......	13
20.00 but under $25.00......	37	....	......	......	37	34	....	......	......	34
18.00 but under 20.00......	26	....	......	......	26	29	....	......	......	29
15.00 but under 18.00......	75	....	......	......	75	79	....	......	......	79
13.00 but under 15.00......	61	....	......	......	61	55	....	......	......	55
12.00 but under 13.00......	65	....	......	......	65	90	....	......	......	90
11.00 but under 12.00......	64	4	......	......	68	74	30	......	......	104
10.00 but under 11.00......	69	13	......	......	82	75	16	......	......	91
9.00 but under 10.00......	172	15	......	......	187	170	20	......	......	190
8.00 but under 9.00......	106	20	......	......	126	112	30	......	......	142
7.00 but under 8.00......	141	35	......	......	176	111	35	5	......	151
6.00 but under 7.00......	115	86	......	......	201	111	82	8	2	203
5.50 but under 6.00......	19	50	......	......	69	20	50	1	......	71
5.00 but under 5.50......	43	106	3	......	152	36	106	......	3	145
4.50 but under 5.00......	24	92	7	......	123	15	70	28	1	114
4.00 but under 4.50......	31	45	37	6	119	20	47	49	9	125
3.50 but under 4.00......	10	52	16	22	100	3	55	21	32	111
3.00 but under 3.50......	367	26	57	49	499	......	32	411	49	492
2.50 but under 3.00......	14	9	19	38	80	......	3	21	28	52
2.00 but under 2.50......	9	14	8	34	65	......	....	41	59	100
1.50 but under 2.00......	11	1	2	15	29	......	....	......	8	8
Under $1.50	......	....	5	......	5	......	....	......	......	......
Totals	1,467	568	154	164	2,353	1,047	576	585	191	2,399

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	72.62	76.29	+ 3.76	+ 5.20
Average number of days in operation	262.40	275.12	+ 12.72	+ 4.84

FLOUR AND FEED—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	86	86	....	....
Number of private firms	58	55	— 3	— 5.17
Number of partners	85	117	+ 32	+ 37.64
Males	83	112	+ 29	+ 34.94
Females	2	5	+ 3	+ 150.
Number of corporations	28	31	+ 3	+ 10.71
Number of stockholders	343	477	+ 134	+ 39.06
Males	293	405	+ 112	+ 38.22
Females	50	72	+ 22	+ 44.
Aggregates: partners and stockholders	428	594	+ 166	+ 38.78
Persons employed.				
Average number	1,095	1,132	+ 37	+ 3.37
Smallest number	1,025	1,108	+ 83	+ 8.09
Greatest number	1,144	1,205	+ 61	+ 5.33
Excess of greatest over smallest	119	97	— 22	— 18.48

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$6,449,116	$7,411,133	+ $962,017	+ 14.91
Stock used—aggregate values.				
Total value of stock used	$15,889,410	$18,724,577	+ $2,835,167	+ 17.84
Goods made—aggregate values.				
Total value of goods made or work done	$19,186,233	$22,016,981	+ $2,830,748	+ 14.75

Persons employed—by months.

Months	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	1,020	5	1,025	1,103	5	1,108
February	1,104	5	1,109	1,109	5	1,114
March	1,029	5	1,034	1,105	5	1,110
April	1,050	5	1,055	1,125	5	1,130
May	1,120	5	1,125	1,122	5	1,127
June	1,120	6	1,126	1,133	6	1,139
July	1,126	6	1,132	1,135	6	1,141
August	1,105	6	1,111	1,125	6	1,131
September	1,101	6	1,107	1,123	6	1,129
October	1,120	6	1,126	1,160	6	1,166
November	1,107	6	1,113	1,165	6	1,171
December	1,079	6	1,085	1,118	6	1,124

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages	$547,830 00	$586,731 00	+ $31,901 00	+ 6.73
Average yearly earnings	500 30	518 31	+ 18 01	+ 3.59

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over	28				28	15				15
20.00 but under $25.00	19				19	10				10
18.00 but under 20.00	29				29	14				14
15.00 but under 18.00	93				93	82				82
13.00 but under 15.00	76				76	64				64
12.00 but under 13.00	95				95	80				80
11.00 but under 12.00	56				56	42				42
10.00 but under 11.00	215				215	220				220
9.00 but under 10.00	238	1			239	290	1			291
8.00 but under 9.00	104	1			105	108	2			110
7.00 but under 8.00	114				114	122				122
6.00 but under 7.00	49	1	1		51	61		1		62
5.50 but under 6.00	5				5	5				5
5.00 but under 5.50	8		1		9	7		3		10
4.50 but under 5.00	4		1		5	5		1		6
4.00 but under 4.50		2			2	1				1
3.50 but under 4.00	1	2			3		1	1	1	3
3.00 but under 3.50	3				3	4	4	1	1	10
2.50 but under 3.00							1			1
2.00 but under 2.50										
1.50 but under 2.00										
Under $1.50										
Totals	1,137	7	3		1,147	1,130	9	7	2	1,148

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	70.37	75.27	+ 4.90	+ 6.96
Average number of days in operation	263.66	271.42	+ 7.76	+ 2.94

FOOD PREPARATIONS—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	31	31	....	....
Number of private firms	14	17	+ 3	+ 21.42
Number of partners	44	54	+ 10	+ 22.72
Males	43	53	+ 10	+ 23.25
Females	1	1	....	....
Number of corporations	17	14	— 3	— 17.64
Number of stockholders	80	67	— 13	— 16.25
Males	77	62	— 15	— 19.48
Females	3	5	+ 2	+ 66.66
Aggregates: partners and stockholders	124	121	— 3	— 2.42

Persons employed.

Average number	1,981	2,118	+ 137	+ 6.91
Smallest number	1,525	1,517	— 8	— .52
Greatest number	3,887	4,317	+ 430	+ 11.07
Excess of greatest over smallest	2,362	2,800	+ 438	+ 18.54

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$4,117,091	$4,751,285	+ $634,194	+ 15.40

Stock used—aggregate values.

Total value of stock used	$10,173,349	$11,338,905	+ $1,165,556	+ 11.45

Goods made—aggregate values.

Total value of goods made or work done	$12,583,578	$13,717,083	+ $1,133,505	+ 9.00

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	1,656	110	1,766	1,710	111	1,821
February	1,557	121	1,678	1,613	122	1,735
March	1,502	97	1,599	1,500	127	1,627
April	1,424	101	1,525	1,387	130	1,517
May	1,474	104	1,578	1,419	131	1,550
June	2,101	367	2,468	1,452	141	1,593
July	2,152	479	2,631	2,269	892	3,161
August	1,948	432	2,380	2,392	1,215	3,607
September	1,656	260	1,916	2,000	945	2,945
October	1,630	144	1,774	1,836	376	2,212
November	1,548	150	1,698	1,646	137	1,783
December	1,635	123	1,758	1,742	121	1,863

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$852,232 00	$898,879 00	+ $46,597 00	+ 5.46
Average yearly earnings...........	430 23	424 40	— 5.83	— 1.35

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over..	29	....	......	......	29	9	....	......	......	9
20.00 but under $25.00......	62	....	......	......	62	27	....	......	......	27
18.00 but under 20.00......	57	....	......	......	57	37	....	......	......	37
15.00 but under 18.00......	64	....	......	......	64	53	....	......	......	53
13.00 but under 15.00......	62	....	......	......	62	87	....	......	......	87
12.00 but under 13.00......	150	....	......	......	150	125	....	......	......	125
11.00 but under 12.00......	110	13	......	......	123	55	....	......	......	55
10.00 but under 11.00......	109	....	......	......	109	115	....	......	......	115
9.00 but under 10.00......	282	....	......	......	282	388	....	......	......	388
8.00 but under 9.00......	191	1	......	......	192	122	....	......	......	122
7.00 but under 8.00......	396	3	......	......	399	608	....	......	......	608
6.00 but under 7.00......	181	40	13	......	234	125	1	15	......	141
5.50 but under 6.00......	29	10	......	......	39	79	1	2	......	82
5.00 but under 5.50......	74	34	64	25	197	113	3	4	......	120
4.50 but under 5.00......	107	81	88	54	330	11	314	480	104	909
4.00 but under 4.50......	39	26	51	25	141	16	280	107	103	506
3.50 but under 4.00......	10	30	48	89	177	1	5	15	186	207
3.00 but under 3.50......	1	7	40	69	117	......	7	21	98	126
2.50 but under 3.00......	......	3	9	8	20	......	5	12	21	38
2.00 but under 2.50......	......	....	......	......	......	......	5	11	16	32
1.50 but under 2.00......	......	....	......	......	......	......	....	8	......	8
Under $1.50	......	....	......	......	......	......	....	2	......	2
Totals	1,953	248	313	270	2,784	1,971	621	677	528	3,797

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	64.30	67.00	+ 2.70	+ 4.20
Average number of days in operation	230.72	238.26	+ 7.54	+ 3.26

IRON GOODS (MALLEABLE)—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	25	25	....	....
Number of private firms	7	7	....	....
Number of partners	15	14	— 1	— 6.66
Males	15	14	— 1	— 6.66
Females	....	....	....	....
Number of corporations	17	17	....	....
Number of stockholders	134	153	+ 19	+ 14.17
Males	130	148	+ 18	+ 13.84
Females	4	5	+ 1	+ 25.
Aggregates: partners and stockholders	149	167	+ 18	+ 12.08

Persons employed.

	1896.	1897.	No.	Per cent.
Average number	3,315	3,350	+ 35	+ 1.05
Smallest number	3,069	2,594	— 475	— 15.47
Greatest number	3,654	4,084	+ 430	+ 11.76
Excess of greatest over smallest	585	1,490	+ 905	+ 154.70

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$4,223,641	$4,427,480	+ $203,839	+ 4.82

Stock used—aggregate values.

Total value of stock used	$2,753,694	$3,010,246	+ $256,552	+ 9.31

Goods made—aggregate values.

Total value of goods made or work done	$6,183,803	$6,344,249	+ $158,446	+ 2.56

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	3,260	....	3,260	2,791	15	2,806
February	3,410	....	3,410	3,357	8	3,365
March	3,360	....	3,360	3,309	10	3,319
April	3,416	....	3,416	3,191	11	3,202
May	3,567	....	3,567	3,060	12	3,072
June	3,517	....	3,517	3,342	12	3,354
July	3,087	....	3,087	2,579	15	2,594
August	3,198	....	3,198	3,233	23	3,256
September	3,069	....	3,069	3,655	23	3,678
October	3,420	....	3,420	4,054	23	4,077
November	3,380	....	3,380	3,857	27	3,884
December	3,096	....	3,096	3,572	19	3,591

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages	$1,484,112	$1,518,760	+ $34,648.00	+ 2.33
Average yearly earnings	447.69	453.36	+ 5.67	+ 1.26

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age	Total.
$25.00 per week and over	133	....	......	......	133	86	....	......	......	86
20.00 but under $25.00	64	....	......	......	64	57	....	......	......	57
18.00 but under 20.00	96	....	......	......	96	63	....	......	......	63
15.00 but under 18.00	218	....	......	......	218	186	....	......	......	186
13.00 but under 15.00	208	....	......	......	208	161	....	......	......	161
12.00 but under 13.00	254	....	......	......	254	312	....	......	......	312
11.00 but under 12.00	159	....	......	......	159	186	....	......	......	186
10.00 but under 11.00	180	....	......	......	180	308	3	......	......	311
9.00 but under 10.00	360	....	......	......	360	382	....	......	......	382
8.00 but under 9.00	229	....	......	......	229	418	....	......	......	418
7.00 but under 8.00	387	....	3	......	390	673	9	1	......	683
6.00 but under 7.00	585	....	13	......	598	477	5	6	......	488
5.50 but under 6.00	58	....	19	......	77	78	....	22	......	100
5.00 but under 5.50	74	....	20	......	94	61	3	28	......	92
4.50 but under 5.00	9	....	52	......	61	63	....	71	......	134
4.00 but under 4.50	4	....	41	......	45	15	....	72	......	87
3.50 but under 4.00	1	....	78	......	79	1	....	110	......	111
3.00 but under 3.50	7	....	76	......	83	3	2	73	2	80
2.50 but under 3.00	......	....	8	......	8	......	....	4	......	4
2.00 but under 2.50	......	....	3	......	3	......	....	8	......	8
1.50 but under 2.00	......	....	......	......	......	......	....	6	......	6
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	3,026	....	313	......	3,339	3,530	22	401	2	3,955

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Aver. proportion of business done	65.38	68.30	+ 2.92	+ 4.46
Aver. number of days in operation	278.74	281.22	+ 2.48	+ .88

LAGER BEER—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	71	71	....	....
Number of private firms	40	40	....	....
Number of partners	88	60	— 28	— 31.81
Males	85	57	— 28	— 32.94
Females	3	3	....	....
Number of corporations	31	31	....	....
Number of stockholders	387	446	+ 59	+ 15.24
Males	347	397	+ 50	+ 14.40
Females	40	49	+ 9	+ 22.50
Aggregates: Partners and stockholders	475	506	+ 31	+ 6.52

Persons employed.

Average number	3,133	3.108	— 25	— 0.79
Smallest number	3,032	2,984	— 148	— 4.88
Greatest number	3,244	3,352	+ 108	+ 3.94
Excess of greatest over smallest	212	368	+ 156	+ 73.58

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$33,943,545	$35,539,091	+ $1,595,546	+ 4.66

Stock used—aggregate values.

Total value of stock used	$3,270,795	$3,702,671	+ $431,876	+ 13.20

Goods made—aggregate values.

Total value of goods made or work done	$15,394,071	$16,945,217	+ $1,551,146	+ 10.07

Persons employed—by months.

Months	1896			1897.		
	Male	Female.	Total	Male.	Female.	Total.
January	2,709	364	3,073	2,796	219	3,015
February	2,719	381	3,100	2,775	209	2,984
March	2,760	390	3,150	2,794	219	3,013
April	2,735	348	3,083	2,838	234	3,072
May	2,790	342	3,132	2,876	269	3,145
June	2,818	347	3,165	2,886	269	3,155
July	2,872	350	3,222	2,960	270	3,230
August	2,881	353	3,234	2,885	270	3,155
September	2,870	322	3,192	2,856	265	3,121
October	2,837	271	3,108	2,843	255	3,098
November	2,823	261	3,084	2,844	219	3,063
December	2.901	255	3,156	3,033	214	3,247

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$1,649,640	$1,686,468	+ $36,828.00	+ 2.23
Average yearly earnings	$526.54	$542.62	+ $16.08	+ 3.05

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over..	65	....	......	......	65	40	....	......	......	40
20.00 but under $25.00......	195	....	......	......	195	40	....	......	......	40
18.00 but under 20.00......	40	....	......	......	40	42	....	......	......	42
15.00 but under 18.00......	551	....	......	......	551	680	....	......	......	680
13.00 but under 15.00......	478	....	......	......	478	518	....	......	......	518
12.00 but under 13.00......	385	....	......	......	385	331	....	......	......	331
11.00 but under 12.00......	135	....	......	......	135	183	....	......	......	183
10.00 but under 11.00......	215	....	......	......	215	219	....	......	......	219
9.00 but under 10.00......	221	....	......	......	221	229	....	......	......	229
8.00 but under 9.00......	99	....	......	......	99	73	....	......	......	73
7.00 but under 8.00......	84	2	......	......	86	128	2	......	......	130
6.00 but under 7.00......	87	2	......	......	89	65	7	2	......	74
5.50 but under 6.00......	12	....	9	......	21	27	....	8	......	35
5.00 but under 5.50......	29	4	6	3	42	17	2	11	......	30
4.50 but under 5.00......	14	2	8	......	24	14	....	54	......	68
4.00 but under 4.50......	10	68	18	......	96	19	72	58	......	149
3.50 but under 4.00......	8	162	61	......	231	23	1	75	......	99
3.00 but under 3.50......	7	24	49	53	133	......	11	50	22	83
2.50 but under 3.00......	......	....	35	44	79	......	7	8	75	90
2.00 but under 2.50......	......	....	......	56	56	......	21	52	......	73
1.50 but under 2.00......	......	....	......	......	......	......	....	......	3	3
Under $1.50	......	....	......	......	......	......	....	......	6	6
Totals	2,635	264	186	156	3,241	2,648	123	318	106	3,195

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	61.35	64.34	+ 2.99	+ 4.87
Average number of days in operation	301.37	300.97	— .40	— 0.13

LEATHER—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1898.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	33	33	....	....
Number of private firms	19	19	....	....
Number of partners	34	79	+ 45	+ 13.23
Males	34	79	+ 45	+ 13.23
Females	....	....	....	....
Number of corporations	14	14	....	....
Number of stockholders	1,731	1,744	+ 13	+ 0.72
Males	1,464	1.460	— 4	— 0.27
Females	267	284	+ 17	+ 6.32
Aggregates: Partners and stockholders	1,765	1,823	+ 38	+ 2.15

Persons employed.

Average number	4,340	4,754	+ 414	+ 9.53
Smallest number	4,075	4,201	+ 126	+ 3.09
Greatest number	4,872	5,329	+ 457	+ 9.38
Excess of greatest over smallest	797	1,128	+ 331	+ 41.53

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$10,394,318	$12.124.012	+ $1.729.694	+ 16.64

Stock used—aggregate values.

Total value of stock used	$9.789,314	$11,320,816	+ $1,531,502	+ 15.64

Goods made—aggregate values.

Total value of goods made and work done	$13,445,346	$15,153,361	+ $1,708,015	+ 12.70

Persons employed—by months.

Month.	1896.			1897.		
	Male	Female.	Total	Male.	Female.	Total.
January	3,839	236	4,075	3,936	265	4,201
February	3,858	238	4,096	4,072	267	4,339
March	3,837	238	4,075	4,119	267	4,386
April	4,104	41	4,145	4,156	269	4,425
May	4,178	248	4,426	4,768	278	5,046
June	4,218	247	4,465	4,937	275	5,212
July	4,519	244	4,763	5,055	274	5,329
August	4,294	245	4,539	4,487	275	4,762
September	4,223	246	4,469	4,555	276	4,831
October	4,150	253	4,403	4,676	281	4,957
November	4,065	252	4,317	4,596	281	4,877
December	4,063	250	4,313	4,400	280	4,680

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897. Amount.	Increase (+) or Decrease (—) in 1897. Percentages.
Total amount paid in wages......	$1,790,571	$2,028,342	+ $237,771.00	+ 13.28
Average yearly earnings	$412.57	$426.66	+ $14.09	+ 3.41

Classified weekly earnings.

Classification of weekly earnings.	1896. Males 18 years of age and over.	1896. Females 18 and over.	1896. Males under 18 years of age.	1896. Females under 18 years of age.	1896. Total.	1897. Males 18 years of age and over.	1897. Females 18 and over.	1897. Males under 18 years of age.	1897. Females under 18 years of age	1897. Total.
$25.00 per week and over...	19	....	......	......	19	18	....	......	......	18
20.00 but under $25.00......	16	....	......	......	16	25	....	......	......	25
18.00 but under 20.00......	59	....	......	......	59	29	....	......	......	29
15.00 but under 18.00......	128	....	......	......	128	97	....	......	......	97
13.00 but under 15.00......	159	....	......	......	159	177	....	......	......	177
12.00 but under 13.00......	276	....	......	......	276	232	....	......	......	232
11.00 but under 12.00......	171	....	......	......	171	200	....	......	......	200
10.00 but under 11.00	324	....	......	......	324	212	....	......	......	212
9.00 but under 10.00......	892	54	......	......	946	900	....	......	......	900
8.00 but under 9.00......	943	....	......	......	943	1,191	2	......	......	1,193
7.00 but under 8.00......	706	....	1	......	707	870	2	......	......	872
6.00 but under 7.00......	317	....	......	......	317	305	25	35	......	365
5.50 but under 6.00......	14	....	......	......	14	33	25	10	......	68
5.00 but under 5.50......	42	55	5	......	102	55	46	9	......	110
4.50 but under 5.00......	16	1	5	1	23	23	51	15	......	89
4.00 but under 4.50......	20	....	44	1	65	35	....	32	......	67
3.50 but under 4.00......	6	....	37	1	44	......	20	28	6	54
3.00 but under 3.50......	20	3	48	......	71	7	18	55	25	105
2.50 but under 3.00......	8	5	12	1	26	......	....	27	11	38
2.00 but under 2.50......	2	....	11	3	16	......	....	14	3	17
1.50 but under 2.00......	......	1	......	1	2	......	....	......	1	1
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	4,138	119	163	8	4,428	4,409	189	225	46	4,869

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897. Proportion and days.	Increase (+) or Decrease (—) in 1897. Percentages.
Average proportion of business done	73.69	79.61	+ 5.92	+ 8.03
Average number of days in operation	280.16	293.03	+ 12.87	+ 4.59

LUMBER, LATH AND SHINGLES—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897. No.	Increase (+) or Decrease (—) in 1897. Per cent.
Number of establishments	168	168	....	....
Number of private firms	*67	*66	— 1	— 1.50
Number of partners	96	105	+ 9	+ 9.37
Males	96	103	+ 7	+ 7.29
Females	....	2	....	....
Number of corporations	*100	*100	+ 1	+ 1.00
Number of stockholders	541	632	+ 91	+ 16.82
Males	453	548	+ 95	+ 20.97
Females	88	84	— 4	— 4.54
Aggregates: Partners and stockholders	637	737	+ 100	+ 15.70

*Not reported.

Persons employed.

	1896.	1897.	No.	Per cent.
Average number	11,542	11,827	+ 285	+ 2.46
Smallest number	6,313	5,195	— 1,118	— 17.70
Greatest number	17,900	19,706	+ 1,806	+ 10.08
Excess of greatest over smallest	11,587	14,511	+ 2,924	+ 25.23

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897. Amount.	Increase (+) or Decrease (—) in 1897. Percentages.
Amount of capital invested	$44,989,633	$45,642,002	+ $652,369	+ 1.45

Stock used—aggregate values.

Total value of stock used	$9,861,062	$12,187,522	+ $2,326,460	+ 23.59

Goods made—aggregate values.

Total value of goods made or work done	$18,322,764	$22,043,162	+ $3,720,398	+ 20.30

Persons employed—by months.

Months	1896. Male.	1896. Female.	1896. Total	1897. Male.	1897. Female.	1897. Total.
January	7,954	34	7,988	5,167	28	5,195
February	8,394	34	8,428	5,825	28	5,853
March	8,379	49	8,428	6,861	33	6,894
April	12,737	74	12,811	12,563	67	12,630
May	15,347	116	15,463	15,820	74	15,894
June	16,093	116	16,209	16,686	87	16,773
July	16,188	131	16,319	16,280	99	16,379
August	14,993	142	15,135	15,933	99	16,032
September	12,699	82	12,781	15,514	82	15,596
October	10,421	67	10,488	14,237	80	14,317
November	8,117	26	8,143	10,331	54	10,385
December	6,292	21	6,313	5,927	29	5,956

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages	$3,904,245	$4,566,264	+ $662,019	+ 16.95
Average yearly earnings	$338.26	$386.09	+ $47.83	+ 14.14

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over	221	....	......	......	221	226	....	......	......	226
20.00 but under $25.00	265	....	......	......	265	228	....	......	.....	228
18.00 but under 20.00	201	....	......	......	201	178	....	......	......	178
15.00 but under 18.00	346	....	......	......	346	319	....	......	......	319
13.00 but under 15.00	378	....	......	......	378	381	....	....	......	381
12.00 but under 13.00	564	....	......	......	564	596	....	......	......	596
11.00 but under 12 00	284	2	......	......	286	436	....	......	......	436
10.00 but under 11.00	797	4	......	.....	801	844	8	......	......	852
9.00 but under 10.00	2,470	1	......	......	2,471	2,856	2	......	......	2,858
8.00 but under 9.00	3,297	4	......	......	3,301	3,916	4	......	......	3,920
7.00 but under 8.00	5,515	6	16	......	5,537	4,494	10	16	2	4,522
6.00 but under 7.00	1,802	15	29	2	1,848	1,668	21	44	.....	1,733
5.50 but under 6.00	181	35	35	......	251	139	....	38	.....	177
5.00 but under 5.50	102	31	23	......	156	151	34	26	......	211
4.50 but under 5.00	97	9	83	4	193	175	5	130	......	310
4.00 but under 4.50	94	4	35	......	133	12	2	64	......	78
3.50 but under 4.00	21	8	51	......	80	13	....	92	......	105
3.00 but under 3.50	2	1	101	......	104	6	4	124	......	134
2.50 but under 3.00	......	2	79	3	84	......	7	65	4	76
2.00 but under 2.50	1	7	29	......	37	......	5	30	2	37
1.50 but under 2.00	......	1	......	......	1	......	....	2	......	2
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	16,638	130	481	9	17,258	16,638	102	631	8	17,379

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	61.20	70.00	+ 8.80	+ 14.37
Average number of days in operation	190.38	203.91	+ 13.53	+ 7.11

MACHINES AND MACHINERY — 1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	86	86	....	....
Number of private firms	45	45	....	....
Number of partners	73	74	+ 1	+ 1.37
Males	73	73	....	....
Females	....	1	....	....
Number of corporations*	39	39	....	....
Number of stockholders	222	254	+ 32	+ 14.41
Males	197	227	+ 30	+ 15.22
Females	25	27	+ 2	+ 8.00
Aggregates: Partners and stockholders	295	328	+ 33	+ 11.19

*Two establishments not reported.

Persons employed.

Average number	4,317	4,486	+ 169	+ 3.91
Smallest number	3,792	4,201	+ 409	+ 10.78
Greatest number	4,921	5,256	+ 335	+ 6.80
Excess of greatest over smallest	1,129	1,055	— 74	— 6.55

Capital invested

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$8,241,923	$9,035,030	+ $793,107	+ 8.77

Stock used—aggregate values.

Total value of stock used	$3,059,369	$3,333,014	+ $273,645	+ 8 94

Goods made—aggregate values.

Total value of goods made or work done	$7,662,023	$8,155,581	+ $493,558	+ 6.44

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	4,609	15	4,624	4,184	17	4,201
February	4,386	15	4,401	4,320	18	4,338
March	4,638	15	4,653	4,453	17	4,470
April	4,693	15	4,708	4,486	17	4,503
May	4,530	15	4,545	4,438	18	4,456
June	4,360	15	4,375	4,464	18	4,482
July	4,314	16	4,330	4,613	19	4,632
August	4,316	16	4,332	4,661	19	4,680
September	4,147	16	4,163	4,688	18	4,706
October	4,022	16	4,038	4,535	18	4,553
November	3,828	15	3,843	4,434	17	4,451
December	3,778	14	3,792	4,346	17	4,363

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount paid in wages..........	$2,195,742	$2,343,671	+ $147,929	+ 6.73
Average yearly earnings...	$508.63	$522.44	+ $13.81	+ 2.71

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
25.00 per week and over	61	....	......	......	61	56	....	......	......	56
20.00 but under $25.00.........	103	....	......	......	103	87	....	......	......	87
18.00 but under 20.00.........	159	....	......	......	159	165	....	......	......	165
15.00 but under 18.00.........	508	....	......	......	508	440	....	......	......	440
13.00 but under 15.00.........	482	....	......	......	482	636	....	......	......	636
12.00 but under 13.00.........	498	....	......	......	498	445	....	......	......	445
11.00 but under 12 00.........	228	2	......	......	230	102	1	......	......	103
10.00 but under 11.00.........	393	2	......	......	395	429	1	......	......	430
9.00 but under 10.00.........	628	1	......	......	629	483	1	......	......	484
8.00 but under 9.00.........	441	1	......	......	442	508	....	......	......	508
7.00 but under 8.00.........	305	....	1	......	306	504	....	1	......	505
6.00 but under 7.00.........	190	3	3	2	198	191	6	3	......	200
5.50 but under 6.00.........	30	1	8	......	39	35	....	5	......	40
5.00 but under 5.50.........	45	3	7	......	55	41	5	18	......	64
4.50 but under 5.00.........	56	....	27	2	85	46	....	33	......	79
4.00 but under 4.50.........	17	....	19	......	36	11	3	54	......	68
3.50 but under 4.00.........	29	....	33	......	62	......	....	48	......	48
3.00 but under 3.50.........	40	....	65	......	105	2	....	103	......	105
2.50 but under 3.00.........	4	....	6	......	10	......	....	12	......	12
2.00 but under 2.50.........	6	....	7	......	13	......	....	17	1	18
1.50 but under 2.00..... ...	......	....	......	......	......	......	....	1	......	1
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	4,223	13	176	4	4,416	4,181	17	295	1	4,494

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done..............................	64.84	68.01	+ 3.17	+ 4.88
Average number of days in operation.	272.64	282.88	+ 10.24	+ 3.75

PAPER AND PULP—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	INCREASE (+) OR DECREASE (−) IN 1897.	
			No.	Per cent.
Number of establishments	34	34	....	....
Number of private firms	*4	3	− 1	− 25.
Number of partners	5	3	− 2	− 40.
Males	5	3	− 2	− 40.
Females	....	....	....	....
Number of corporations	*27	28	+ 1	+ 3.70
Number of stockholders	184	174	− 10	− 5.43
Males	180	156	− 24	− 13.33
Females	4	18	+ 14	+ 3.50
Aggregates: partners and stockholders	189	177	− 12	− 6.34

* Three establishments not reported.

Persons employed.

Average number	3,117	3,152	+ 35	+ 1.12
Smallest number	2,774	2,893	+ 119	+ 4.29
Greatest number	3,667	3,716	+ 49	+ 1.33
Excess of greatest over smallest	893	823	− 70	− 8.17

Capital invested.

	1896.	1897.	INCREASE (+) OR DECREASE (−) IN 1897.	
			Amount.	Percentages.
Amount of capital invested	$8,224,977	$9,014,723	+ $789,746	+ 9.60

Stock used—aggregate values.

Total value of stock used	$3,392,882	$3,481,577	+ $88,695	+ 2.61

Goods made—aggregate values.

Total value of goods made or work done	$6,592,166	$6,555,806	− $36,360	− 0.55

Persons employed — by months.

Months.	1896.			1897.		
	Male.	Female	Total.	Male.	Female.	Total.
January	2,400	680	3,080	2,430	620	3,050
February	2,452	704	3,156	2,452	624	3,076
March	2,604	757	3,361	2,646	628	3,274
April	2,653	704	3,357	2,589	633	3,222
May	2,727	678	3,405	2,628	636	3,264
June	2,643	659	3,302	2,549	625	3,174
July	2,453	486	2,939	2,426	637	3,063
August	2,364	502	2,866	2,289	604	2,893
September	2,270	504	2,774	2,401	603	3,004
October	2,551	646	3,197	2,615	629	3,244
November	2,613	651	3,264	2,646	665	3,311
December	2,699	647	3,346	2,602	647	3,249

Wages and earnings.

	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$1,243,243	$1,240,476	— $2,767 00	— 0.22
Average yearly earnings	398 85	393 71	— 5 14	— 1.30

Classified weekly earnings.

Classification o weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age	Total.
$25.00 per week and over...	15	....	......	......	15	11	....	......	......	11
20.00 but under $25.00......	7	....	......	......	7	5	....	......	......	5
18.00 but under 20.00......	79	....	......	......	79	82	....	......	......	82
15.00 but under 18.00......	93	....	......	......	93	94	....	......	......	94
13.00 but under 15.00......	66	....	......	......	66	82	....	......	......	82
12.00 but under 13.00......	103	....	......	......	103	101	....	......	......	101
11.00 but under 12.00......	28	....	......	......	28	46	....	......	......	46
10.00 but under 11.00......	143	....	......	......	143	143	....	......	......	143
9.00 but under 10.00......	577	....	......	......	577	641	....	......	......	641
8.00 but under 9.00......	451	....	......	......	451	232	....	......	......	232
7.00 but under 8.00......	526	2	......	......	528	861	8	......	1	870
6.00 but under 7.00......	396	44	4	......	444	261	43	9	2	315
5.50 but under 6.00......	42	12	19	......	73	22	6	......	......	28
5.00 but under 5.50......	33	59	3	......	95	34	51	6	......	91
4.50 but under 5.00......	60	362	27	10	459	21	263	42	23	349
4.00 but under 4.50......	......	11	1	......	12	13	46	41	......	100
3.50 but under 4.00......	4	19	1	1	25	......	3	94	......	97
3.00 but under 3.50......	3	81	6	8	98	......	80	32	......	112
2.50 but under 3.00......	......	....	......	......	......	......	....	......	1	1
2.00 but under 2.50......	2	....	1	......	3	......	2	1	14	17
1.50 but under 2.00......	......	2	......	......	2	......	....	......	......	......
Under $1.50	......	....	......	12	12	......	....	......	......	......
Total	2,628	592	62	31	3,313	2,649	502	225	41	3,417

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Proportion and days.	Percentages.
Average proportion business done	83.20	83.00	— 0.20	— 0.24
Average number days in operation	288.78	287.85	— 0.93	— 0.35

SASH, DOORS, BLINDS, ETC.—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897. No.	Per cent.
Number of establishments	73	73	....	....
Number of private firms	*44	43	— 1	— 2.27
Number of partners	92	91	— 1	— 1.08
Males	92	91	— 1	— 1.08
Females	....	....	....	....
Number of corporations	*29	30	+ 1	+ 3.45
Number of stockholders	178	181	+ 3	+ 1.68
Males	161	163	+ 2	+ 1.24
Females	17	18	+ 1	+ 5.88
Aggregates: partners and stockholders	270	272	+ 2	+ 0.73

*Number not reporting, 3.

Persons employed.

	1896.	1897.	No.	Per cent.
Average number	3,207	3,507	+ 300	+ 0.09
Smallest number	2,716	2,788	+ 72	+ 2.65
Greatest number	3,714	4,015	+ 301	+ 8.10
Excess of greatest over smallest	998	1,227	+ 229	+ 22.94

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897. Amount.	Percentages.
Amount of capital invested	$5,504,932	$5,541,357	+ $36,425	+ 0.66

Stock used—aggregate values.

Value of stock used	$2,680,742	$2,879,007	+ $198,265	+ 7.39

Goods made—aggregate values.

Total value of goods made or work done	$5,002,045	$5,260,706	+ $258,661	+ 5.17

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	2,681	35	2,716	3,496	38	3,534
February	2,800	35	2,835	2,748	40	2,788
March	2,922	35	2,957	2,979	40	3,019
April	3,418	39	3,457	3,519	44	3,563
May	3,543	43	3,586	3,643	43	3,686
June	3,545	39	3,584	3,840	44	3,884
July	3,646	40	3,686	3,856	46	3,902
August	3,397	40	3,437	3,638	45	3,683
September	3,221	35	3,256	3,614	40	3,654
October	3,107	35	3,142	3,559	39	3,598
November	3,017	33	3,050	3,471	38	3,509
December	2,749	34	2,783	3,236	38	3,274

Wages and earnings.

	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$1,086.510	$1,159.449	+ $72,939 00	+ 6.71
Average yearly earnings...........	338.79	330.61	— 8.18	— 2.41

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over..	11	....	......	......	11	7	....	......	......	7
20.00 but under $25.00......	23	....	......	......	23	21	....	......	......	21
18.00 but under 20.00......	36	....	......	......	36	36	....	......	......	36
15.00 but under 18.00......	104	....	......	......	104	102	....	......	......	102
13.00 but under 15.00......	133	....	......	......	133	121	....	......	......	121
12.00 but under 13.00......	221	....	......	......	221	230	....	......	......	230
11.00 but under 12.00......	39	1	......	......	40	59	....	......	......	59
10.00 but under 11.00......	245	1	......	......	246	277	....	......	......	277
9.00 but under 10.00......	420	....	......	......	420	415	1	......	......	416
8.00 but under 9.00......	341	1	......	......	342	278	....	......	......	278
7.00 but under 8.00......	492	5	4	......	501	492	....	......	......	492
6.00 but under 7.00......	560	5	8	1	574	736	3	6	......	745
5.50 but under 6.00......	104	....	21	......	125	33	....	......	......	33
5.00 but under 5.50......	77	6	22	......	105	115	1	24	......	140
4.50 but under 5.00......	35	....	38	......	73	100	....	87	......	187
4.00 but under 4.50......	20	4	41	......	65	37	3	68	......	108
3.50 but under 4.00......	15	10	46	......	71	34	10	99	......	143
3.00 but under 3.50......	39	6	70	......	115	18	5	134	5	162
2.50 but under 3.00......	26	....	58	......	84	......	....	115	1	116
2.00 but under 2.50......	......	....	......	......	......	......	59	98	14	171
1.50 but under 2.00......	......	....	......	......	......	......	....	8	......	8
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	2,941	39	308	1	3,289	3,111	82	639	20	3,852

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	66.25	69.76	+ 3.51	+ 5.29
Average number days in operation	248.02	257.14	+ 9.12	+ 3.67

WAGONS, CARRIAGES AND SLEIGHS—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897. No.	Per cent.
Number of establishments	53	53	....	....
Number of private firms	35	36	+ 1	+ 2.85
Number of partners	94	116	+ 22	+ 23.40
Males	91	112	+ 21	+ 23.07
Females	3	4	+ 1	+ 33.33
Number of corporations	18	17	— 1	— 5.55
Number of stockholders	292	288	— 4	— 1.36
Males	256	250	— 6	— 2.34
Females	36	38	+ 2	+ 5.55
Aggregates: partners and stockholders	386	404	+ 18	+ 4.66

Persons employed.

	1896.	1897.	No.	Per cent.
Average number	2,084	2,370	+ 286	+ 13.24
Smallest number	1,567	2,193	+ 626	+ 40.
Greatest number	2,455	2,641	+ 186	+ 7.57
Excess of greatest over smallest	888	448	— 440	— 49.54

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897. Amount.	Percentages.
Amount of capital invested	$4,258,192	$5,288,915	+ $1,030,723	+ 24.20

Stock used—aggregate values.

	1896.	1897.	Amount.	Percentages.
Total value of stock used	$1,522,409	$2,116,750	+ $594,341	+ 39.03

Goods made—aggregate values.

	1896.	1897.	Amount.	Percentages.
Total value of goods made or work done	$3,121,558	$4,256,259	+ $1,134,701	+ 36.67

Persons employed—by months.

Months	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	2,079	41	2,120	2,156	42	2,198
February	2,157	42	2,199	2,151	42	2,193
March	2,260	45	2,305	2,234	42	2,276
April	2,239	46	2,285	2,311	44	2,355
May	2,381	54	2,435	2,423	44	2,467
June	2,370	64	2,434	2,455	45	2,500
July	2,322	59	2,381	2,545	43	2,588
August	2,036	43	2,079	2,407	35	2,442
September	1,732	42	1,774	2,322	32	2,354
October	1,789	31	1,820	2,264	30	2,294
November	1,559	32	1,591	2,320	32	2,352
December	1,535	32	1,567	2,395	37	2,432

Wages and earnings.

	1896.	1897.	Increase (+) or Decrease (−) in 1897.	
			Amount.	Percentages.
Total amount paid in wages	$736,689.00	$951,241.00	− $214,552.00	+ 29.12
Average yearly earnings	353.50	401.37	+ 47.87	+ 13.54

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over	13	....	......	......	13	9	....	......	......	9
20.00 but under $25.00	21	....	......	......	21	24	....	......	......	24
18.00 but under 20.00	26	....	......	......	26	34	....	......	......	34
15.00 but under 18.00	99	....	......	......	99	120	....	......	......	120
13.00 but under 15.00	90	....	......	......	90	154	....	......	......	154
12.00 but under 13.00	199	....	......	......	199	425	....	......	......	425
11.00 but under 12.00	109	....	......	......	109	200	3	......	......	203
10.00 but under 11.00	166	....	......	......	166	398	6	......	......	404
9.00 but under 10.00	387	3	......	......	390	331	9	......	......	340
8.00 but under 9.00	328	....	......	......	328	233	7	......	......	240
7.00 but under 8.00	453	4	1	......	458	284	2	5	......	291
6.00 but under 7.00	163	3	12	......	178	162	4	13	......	179
5.50 but under 6.00	51	1	......	......	52	35	1	1	......	37
5.00 but under 5.50	47	8	14	......	69	21	....	13	......	34
4.50 but under 5.00	25	11	26	......	62	19	....	36	......	55
4.00 but under 4.50	7	1	9	4	21	3	3	16	......	22
3.50 but under 4.00	22	5	22	......	49	......	4	12	......	16
3.00 but under 3.50	2	5	33	1	41	......	3	20	1	24
2.50 but under 3.00	......	1	9	2	12	......	....	9	......	9
2.00 but under 2.50	......	....	......	......	......	......	....	1	......	1
1.50 but under 2.00	......	....	2	......	2	......	....	1	......	1
Under $1.50	......	....	......	......	......	......	....	......	......	......
Totals	2,208	42	128	7	2,385	2,452	42	127	1	2,622

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	Increase (+) or Decrease (−) in 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	56.75	71.80	+ 15.05	+ 26.51
Average number of days in operation	241.42	287.35	+ 45.93	+ 19.02

THE TWELVE FOREGOING INDUSTRIES COMBINED.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (−) in 1897.	
			No.	Per cent.
Number of establishments	715	715	....	....
Number of private firms	350	348	− 2	− 0.57
Number of partners	655	747	+ 92	+ 14.12
Males	646	731	+ 85	+ 14.15
Females	9	16	+ 7	+ 77.77
Number of corporations	358	360	+ 2	+ 0.55
Number of stockholders	4,407	4,820	+ 413	+ 9.37
Males	3,836	4,168	+ 332	+ 8.65
Females	571	652	+ 81	+ 14.18
Aggregates: partners and stockholders	5,062	5,567	+ 505	+ 9.96

Twelve not reporting.

Persons employed.

Average number	42,226	44,169	+ 1,943	+ 4.60
Smallest number	33,417	33,428	+ 11	+ .03
Greatest number	54,406	58,464	+ 4,058	+ 7.27
Excess greatest over smallest	20,989	25,036	+ 4,047	+ 19.28

Capital invested.

	1896.	1897.	Increase (+) or Decrease (−) in 1897.	
			Amount.	Percentages.
Amount of capital invested	$138,553,272	$148,504,609	+ $9,951,327	+ 7.18

Stock used—aggregate values.

Total amount of stock used	$66,404,057	$76,253,649	+ $9,849,592	+ 14.83

Goods made—aggregate values.

Total value of goods made or work done	$115,041,694	$128,106,961	+ $13,065,267	+ 11.36

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	36,296	2,294	38,590	33,251	2,140	35,391
February	36,958	2,323	39,281	34,198	2,174	36,372
March	37,383	2,412	39,795	35,789	2,182	37,971
April	42,274	2,120	44,394	41,757	2,230	43,987
May	45,098	2,334	47,432	45,565	2,254	47,819
June	46,106	2,572	48,678	46,999	2,237	49,236
July	45,950	2,498	48,448	46,941	2,988	49,929
August	43,595	2,446	46,041	46,187	3,311	49,498
September	40,140	2,202	42,342	45,829	3,010	48,839
October	38,087	2,160	40,247	45,012	2,438	47,450
November	35,082	2,050	37,132	40,688	2,162	42,850
December	33,177	2,082	35,259	36,130	2,152	38,282

Wages and earnings.

	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Amount.	Percentages.
Total amount paid in wages	$17,113,294	$18,606,183	+ $1,492,889	+ 8.72
Average yearly earnings	405.28	421.25	+ 15.97	+ 3.94

Classified weekly earnings.

Classifications of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over	632	......	......	......	632	506	....	......	......	506
20.00 but under $25.00	850	......	......	......	850	545	....	......	......	545
18.00 but under 20.00	844	......	......	......	844	741	....	......	......	741
15.00 but under 18.00	2,406	......	......	......	2,406	2,350	....	......	......	2,350
13.00 but under 15.00	2,305	......	......	......	2,305	2,625	....	......	......	2,625
12.00 but under 13.00	3,095	......	......	......	3,095	3,192	....	......	......	3,192
11.00 but under 12.00	1,662	......	22	......	1,684	1,730	34	......	......	1,764
10.00 but under 11.00	3,167	19	......	......	3,186	3,382	34	......	......	3,416
9.00 but under 10.00	6,976	76	......	......	7,052	7,402	34	......	......	7,436
8.00 but under 9.00	6,783	32	4	......	6,819	7,386	45	......	......	7,431
7.00 but under 8.00	9,605	60	27	1	9,693	9,510	68	28	3	9,609
6.00 but under 7.00	4,250	190	101	5	4,550	4,326	198	204	4	4,732
5.50 but under 6.00	539	116	112	......	767	516	83	90	......	689
5.00 but under 5.50	543	300	185	28	1,056	660	251	156	3	1,070
4.50 but under 5.00	510	562	367	71	1,510	524	703	1,011	128	2,366
4.00 but under 4.50	256	167	304	36	763	171	507	558	112	1,348
3.50 but under 4.00	187	284	419	113	1,002	75	99	615	225	1,014
3.00 but under 3.50	505	147	538	180	1,370	41	162	1,043	208	1,453
2.50 but under 3.00	30	20	177	58	285	......	23	276	141	440
2.00 but under 2.50	22	21	62	94	199	......	33	185	95	313
1.50 but under 2.00	12	5	4	16	37	......	....	26	4	30
Under $1.50	......	......	6	12	18	......	....	2	6	8
Totals	45,179	2,003	2,328	614	50,124	45,682	2278	4,194	924	53,078

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	68.04	71.96	+ 3.92	+ 5.76
Average number of days in operation	260.46	270.28	+ 9.82	+ 3.77

ALL INDUSTRIES—1896 AND 1897.

Number of establishments, partners, stockholders, etc.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			No.	Per cent.
Number of establishments	1,245	1,245	....	....
Number of private firms	619	625	+ 6	+ 0.96
Number of partners	1,134	1,325	+ 191	+ 16.84
Males	1,104	1,262	+ 158	+ 14.
Females	30	63	+ 33	+ 110.
Number of corporations	614	608	— 6	— 0.97
Number of stockholders	7,214	7,716	+ 502	+ 6.95
Males	6,417	6,769	+ 352	+ 5.48
Females	797	947	+ 150	+ 18.82
Aggregates: partners and stockholders	8,348	9,041	+ 693	+ 18.18

Persons employed.

Average number	80,051	87,534	+ 7,483	+ 9.34
Smallest number	65,569	71,207	+ 5,638	+ 8.59
Greatest number	99,546	109,839	+10,293	+ 10.34
Excess of greatest over smallest	33,977	38,632	+ 4,655	+ 13.70

Capital invested.

	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Percentages.
Total amount of capital invested	$175,905,124	$189,760,669	+ $13,855,545	+ 7.87

Stock used—aggregate values.

Total value of stock used	$87,027,266	$98,130,070	+ $11,102,804	+ 12.76

Goods made—aggregate values.

Total value of goods made or work done	$155,152,906	$169,946,673	+ $14,793,767	+ 9.53

Persons employed—by months.

Months.	1896.			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
January	65,965	9,049	75,014	66,992	8,554	75,546
February	67,895	9,179	77,074	68,967	8,794	77,760
March	68,655	9,579	78,234	71,252	9,246	80,498
April	74,500	9,965	84,465	77,959	9,524	87,483
May	77,872	9,569	87,441	82,573	9,749	92,322
June	78,332	9,579	87,911	83,232	9,500	92,732
July	76,993	9,333	86,326	82,315	10,015	92,330
August	74,191	9,354	83,545	82,131	10,436	92,567
September	70,254	9,099	79,353	82,383	10,295	92,678
October	68,335	9,116	77,451	83,147	9,826	92,973
November	65,806	8,933	74,739	78,657	9,561	88,218
December	62,174	8,626	70,800	73,805	9,454	83,259

Wages and earnings.

	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Amount.	Percentages.
Total amount paid in wages......	$31,749,822	$36,583,044	+ $4,833,222	+ 15.22
Average yearly earnings............	$386.63	$416.79	+ $30.16	+ 7.31

Classified weekly earnings.

Classification of weekly earnings.	1896.					1897.				
	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.	Males 18 years of age and over.	Females 18 and over.	Males under 18 years of age.	Females under 18 years of age.	Total.
$25.00 per week and over..	1,030	....	......	......	1,030	861	....	......	......	861
20.00 but under $25.00......	1,533	....	......	......	1,533	1,674	....	......	......	1,674
18.00 but under 20.00......	1,496	....	......	......	1,496	1,632	....	......	......	1,632
15.00 but under 18.00......	3,990	....	......	......	3,990	3,860	....	......	......	3,860
13.00 but under 15.00......	3,924	....	......	......	3,924	4,194	....	......	......	4,194
12.00 but under 13.00......	5,819	1	......	......	5,820	7,156	....	......	......	7,156
11.00 but under 12.00......	2,823	36	......	......	2,859	3,193	78	......	......	3,271
10.00 but under 11.00......	5,948	65	......	......	6,013	6,117	74	......	......	6,191
9.00 but under 10.00......	17,292	146	......	......	17,438	14,357	118	......	......	14,475
8.00 but under 9.00......	9,380	129	......	......	9,509	10,321	202	......	......	10,523
7.00 but under 8.00......	14,007	288	65	......	14,360	14,633	307	133	61	15,134
6.00 but under 7.00......	8,526	763	212	23	9,524	7,878	738	293	30	8,939
5.50 but under 6.00......	1,356	598	209	42	2,205	1,515	386	215	11	2,127
5.00 but under 5.50......	1,190	1460	324	71	3,045	1,244	821	304	24	2,393
4.50 but under 5.00......	1,136	1305	873	145	3,459	1,135	1471	1,474	164	4,244
4.00 but under 4.50......	603	866	746	161	2,376	477	1145	1,231	278	3,131
3.50 but under 4.00......	477	1112	880	493	2,962	223	401	1,394	433	2,451
3.00 but under 3.50......	776	875	1,230	530	3,411	135	823	2,051	772	3,781
2.50 but under 3.00......	136	282	764	545	1,727	......	262	1,105	626	1,993
2.00 but under 2.50......	73	187	389	326	925	......	201	676	403	1,280
1.50 but under 2.00......	12	34	68	102	216	......	54	97	206	357
Under $1.50	......	1	6	38	45	......	9	3	74	86
Totals	81,527	8098	5,766	2,476	97,867	80,605	7090	8,976	3,082	99,753

Proportion of business done.

Proportion of business done and days in operation.	1896.	1897.	INCREASE (+) OR DECREASE (—) IN 1897.	
			Proportion and days.	Percentages.
Average proportion of business done	69.53	71.80	+ 2.27	+ 3.26
Average number days in operation	263.40	270.81	+ 7.41	+ 2.81

ANALYSIS.

The analysis following hereafter refers to the statistical presentation found on pages 559 to 655, inclusive, in this volume, and will be reviewed under the same heads. They are based upon the reports from 1,245 identical establishmens for the years 1896 and 1897, and so far as they relate to the matter of wages, number of persons employed and time in operation, they are based upon the returns of 1,499 identical establishments for the same two years.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS.

On pages 559 to 560 will be found the tables relating to Private Firms and Corporations and Partners and Stockholders. Of 1,245 establishments, each of which made returns for the years 1896 and 1897, twelve establishments omitted or failed for both years,—probably for reasons of their own, to designate under what system they conducted their business. Of the 1,233 establishments for the year 1896, we find 619 private firms and 614 corporations; or expressing it by percentage, 50.20 per cent. were conducted by private firms and 49.80 per cent. by corporations.

For the year 1897 there were 625 private firms and 608 corporations, or 50.69 per cent. of the establishments were managed by private firms and 49.31 per cent. by corporations. Both years show that the management of business was practically evenly divided between private firms and corporations. This fact is worthy of note, for the reason that as a rule the private firms largely predominate.

The comparisons by years and percentages are contained in the following table:

PRIVATE FIRMS AND CORPORATIONS.	NUMBER.		PERCENTAGES.	
	1896.	1897.	1896.	1897.
Private firms	619	625	50.20	50.69
Corporations	614	608	49.80	49.31
Total	1,233	1,233	100.00	100.00

The total number of partners was 1,134 in 1896 and 1,325 in 1897, an increase of 191 or 16.84 per cent.

The next following table shows a classification of partners by sex, for each year:

PARTNERS.	NUMBER.		PERCENTAGES.	
	1896.	1897.	1896.	1897.
Males	1,104	1,262	97.35	95.25
Females	30	63	2.65	4.75
Total	1,134	1,325	100.00	100.00

It will be seen that the women play but a small part in the management of private firms, the men constituting 97.35 per cent. of the whole number in 1896 and 95.25 in 1897.

The number of females, however, more than doubled in the two years, rising from 30 in 1896 to 63 in 1897, or an increase of 110 per cent.

Considering them in relation to the whole number of partners, their proportion was 2.65 per cent. in 1896 and 4.75 in 1897.

The total number of stockholders is shown to be 7,214 in 1896 and 7,716 in 1897, an increase of 502, or 6.96 per cent.

The following table shows a classification of stockholders by sex:

STOCKHOLDERS.	NUMBER.		PERCENTAGES.	
	1896.	1897.	1896.	1897.
Males	6,417	6.769	88.95	87.73
Females	797	947	11.05	12.27
Total	7,214	7,716	100.00	100.00

The number of female stockholders increased from 797 to 947, a gain of 150; or in other words an increase of 18.82 per cent. Their proportion of the whole number of stockholders was 11.05 in 1896 as against 12.27 in 1897.

The next table shows a consolidation of the number of partners and the number of stockholders, and the relative interests occupied by the males and females.

PARTNERS AND STOCKHOLDERS.	NUMBER.		PERCENTAGES.	
	1896.	1897.	1896.	1897.
Males	7,521	8,031	90.09	88.83
Females	827	1,010	9.91	11.17
Total	8,348	9,041	100.00	100.00

The total number of partners and stockholders was 8,348 in 1896 and 9,041 in 1897, an increase of 693, or 8.30 per cent. The males increased 510 in 1897 over 1896, or 6.78 per cent., while the gain by the females was 183 in the same period, or 22.13 per cent.

The effect of this large increase on the part of the females upon the proportion to the total number is a decline in the proportion of the males from 90.09 to 88.83 per cent., or a decrease of 1.26 per cent. This same difference of 1.26 per cent. is, of course, identical with an increase for the females.

A short summary relating to partners and stockholders, with the aggregate and average number of each and their difference, is found in the following table:

CLASSIFICATION.	NUMBER.	
	1896.	1897.
Private firms	619	625
Partners	1,134	1,325
Average number of partners to private firm	1.83	2.12
Corporations	614	608
Stockholders	7,214	7,716
Average number of stockholders to corporation	11.75	12.69

The average to a private firm was 1.83 in 1896 and 2.12 in 1897, while the average number of stockholders to a corporation was 11.75 in 1896 and 12.69 in 1897. While the number of private firms increased by six and the number of partners by 191, the increase in the average number of partners to each firm is very small.

On the other hand, we find six less of corporations in 1897 than in 1896, but the numerical increase of stockholders was 502, adding nearly one person to the average number of stockholders to a corporation, and would indicate a wider diffusion of capital as a result of corporate management.

CAPITAL INVESTED.

On page 561 will be found a table where comparison is made between the amount of capital invested in each industry for the year 1896 and 1897. The amounts of increase or decrease are stated both in amounts and percentages. The 1,245 establishments considered returned an aggregate capital of $175,905,124 in 1896 and $189,760,669 in 1897, an increase for the latter year of $13,855,545 or 7.87 per cent.

Industries showing an increase of capital invested in 1897 over 1896 are:

Agricultural Implements.
Artisans' Tools and Hardware Specialties.
Bicycles, Tricycles, etc.
Boxes (Wooden and Paper).
Brooms, Brushes, Etc.
Burial Cases, Caskets, Coffins, Etc.
Cement, Lime, Plaster, Etc.
Chairs.
Cigars, Snuff and Tobacco.
Clothing.
Confectionery, Crackers, Etc.
Cooperage.
Cotton and Linen Goods.
Electrical and Gas Apparatus.
Flour and Feed.
Food Preparations.
Furs, Gloves and Mittens.
Iron Goods (Malleable).
Knit Goods.
Lager Beer.
Leather.
Lumber, Lath and Shingles.
Malt.
Machines and Machinery.
Paints, Oils and Crude Chemicals.
Paper and Pulp.
Printers' Supplies.
Saddlery, Harness, Etc.
Sash, Doors, Blinds, Etc.
Ship and Boat Building.
Soap, Lye, Potash, Etc.
Staves and Heading.
Straw Goods.
Toys and Games.
Trunks, Valises, Etc.
Veneer.
Wagons, Carriages, Etc.
Woodenware.
Woolen and Worsted Goods.

Industries showing a decrease in capital invested in the same period are:

Boots and Shoes.
Brick, Tile and Sewer Pipe.
Cooking and Heating Apparatus.
Furniture.
Office and Saloon Fixtures.
Sheet Metal Goods.
Stone (Marble and Granite).

In some of the industries the capital invested shows very little change, and it may be said that it practically remains the same in each year. The increase varies from 0.06 per cent. in ship and boat building to 32.15 in paints, oils and crude chemicals. The decrease ranges from 2.14 per cent. in sheet metal goods to 29.02 per cent. in cut stone.

In the following table some of the leading industries in the state are grouped for the purpose of a more comprehensive review. They represent 44.26 per cent. of the 1,245 establishments considered.

INDUSTRIES.	No. of establishments considered.	AMOUNT OF CAPITAL INVESTED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amounts.	Per cent.
Flour and feed	86	$6,449,116	$7,411,133	+ $962,017	14.91
Lager beer	71	33,943,545	35,539,091	+ 1,595,546	4.66
Leather	33	10,394,318	12,124,012	+ 1,729,694	16.64
Lumber, lath and shingles	168	44,989,633	45,642,002	+ 652,369	1.45
Machines and machinery	86	8,244,923	9,038,030	+ 793,107	8.77
Paper and pulp	34	8,224,977	9,014,723	+ 789,746	9.60
Sash, doors, blinds, etc	73	5,504,932	5,541,357	+ 36,425	0.66
Other industries	694	58,153,680	65,450,321	+ 7,296,641	12.55
All industries	1,245	$175,905,124	$189,760,669	+ $13,855,545	7.87

In the seven industries mentioned in the foreging table, we find an aggregate capitalization of $117,751,444 in 1896 and $124,310,348 in 1897. Expressed in percentages these amounts are 66.94 per cent. of the aggregate capital for 1896 and 65.51 per cent. of the aggregate capital for 1897. It will be noted that they all show an increase, ranging from 0.66 per cent. in sash, doors and blinds to 16.64 per cent. in leather. The other 694 establishments show an aggregate capital of $58,153,680, as reported for 1896, which was increased to $65,450,321, in 1897. This increase is $7,296,641, or 12.55 per cent., while the increase in the total capital invested, that is to say, the capital invested in the 1,245 establishments representing "All Industries," amounted to 7.87 per cent.

It should be borne in mind that the term "capital" used in this report includes all forms of capital used or devoted to production. In other words, it is made up of the value of land and buildings, machinery, fixtures and tools, cash, whether owned or borrowed, cost of raw material on hand, etc. Some of the factors making up the total capital in an industry may be of a kind that may vary in value from year to year, and therefore have a more or less fluctuating effect on the amount of capital invested; but as a rule, an increase in capital generally means an increase in the amount of product of the establishment.

STOCK USED.

On page 562 of this report will be found the statistical table where a comparison is made between the two years of the stock or material used.

The term "stock used" here is understood to mean for every establishment, all kinds of materials and supplies that is necessary to the complete production of the goods.

In the 1,245 establishments making returns, $87,027,266 of stock was consumed in 1896 as against $98,130,070 in 1897, an increase in the latter year of $11,102,804, or 12.76 per cent.

With the exception of the following industries, which show a decrease:—"Agricultural implements; artisans' tools and hardware specialties; brick, tile and sewer pipe; brooms, brushes, etc.; cement, lime, etc.; cooperage; furniture; furs, gloves, etc.; malt; office and saloon fixtures; ship-building and woodenware," twelve in number,—all the other industries show an increase in the consumption of raw material, ranging from 2.24 per cent. in cut stone, to 59.92 per cent. in soap, lye and potash.

The decrease in the above mentioned industries varies from 1.27 per cent. in brooms, brushes, etc., to 41.13 per cent. in ship-building.

The seemingly low value of the stock used in the manufacture of lager beer is perhaps explained by the fact that in the returns made for said industry, no allowance has been made for the expense of United States and other revenue. This fact should be taken into account when the subject of stock used in said industry is considered.

We again compare the same seven industries in the following table:

Industries.	No. of establishments considered.	Value of Stock Used.		Increase (+) or Decrease (—) in 1897.	
		1896.	1897.	Amount.	Pct.
Flour and feed	86	$15,889,410	$18,724,577	+ $2,835,167	17.84
Lager beer	71	3,270,795	3,702,671	+ 431,876	13.20
Leather	33	9,789,314	11,320,816	+ 1,531,502	15.64
Lumber, lath and shingles	168	9,861,062	12,187,522	+ 2,326,460	23.59
Machines and machinery	86	7,662,023	8,155,581	+ 493,558	+ 6.44
Paper and pulp	34	3,392,882	3,481,577	+ 88,695	2.61
Sash, doors, blinds, etc	73	2,680,742	2,879,007	+ 198,265	7.39
Other industries	694	39,083,692	42,500,886	+ 3,417,194	8.74
All industries	1,245	$87,027,266	$98,130,070	+ $11,102,804	12.76

The value of stock used in the above industries in 1896 was $47,943,574, and in 1897 it was $55,629,184, which is 55.09 per cent. of the total value of stock used in 1896, and 56.69 per cent. of the total stock used in 1897. Each of the seven industries shows a heavy increase, varying from 2.61 per cent. in paper and pulp, which is by far the smallest, to 23.59 per cent. in lumber, lath and shingles.

The seven industries combined show an increase in 1897 over 1896 of $7,685,610, or 16.03 per cent. The increase for 1897 in "other industries" was 8.74 per cent. and for "all industries," as have already been noted, it was 12.76 per cent.

GOODS MADE.

The statistical table relating to goods made and work done in the classified industries in the state will be found on page 563.

A detailed comparison is there made between the years 1896 and 1897, both as to the value of the goods made, as well as the increase or decrease and its expression in percentages, and all analysis relating to product, or goods made in said years, are based upon the contents in said tables.

The total value of goods made and work done in the 1,245 establishments in 1896 was $155,152,906, rising in 1897 to $169,946,673, an increase of $14,793,767, or 9.53 per cent.

A decrease is noted in twelve industries, namely: Agricultural implements; artisans' tools, etc.; brick, tile, etc.; brooms, brushes, etc.; cement, lime, etc.; cooperage; furniture; furs, gloves, etc.; electrical and gas apparatus; paper and pulp; ship and boat building; and woodenware.

The decrease in some of these industries is quite marked, and the differences in the percentage of decrease, looking at the twelve, is seen to be of wide scope, ranging from 0.28 per cent. in electrical and gas apparatus to 44.57 per cent. in ship and boat building.

In the different industries where the value of goods made and work done is greater in 1897 than in 1896, the increase ranges from 0.15 per cent. in cut stone to 56.71 per cent. in soap, lye and potash.

For the purpose of further comparison, the returns of the seven industries are again brought forward in the following table:

INDUSTRIES.	No. of establishments considered	VALUE OF GOODS MADE AND WORK DONE.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Amount.	Perc't.
Flour and feed	86	$19,186,233	$22,016,981	+ $2,830,748	+ 14.75
Lager beer	71	15,394,071	16,945,217	+ 1,551,146	+ 10.07
Leather	33	13,445,346	15,153,361	+ 1,708,015	+ 12.70
Lumber, lath and shingles	168	18,322,764	22,043,162	+ 3,720,398	+ 20.30
Machines and machinery	86	7,662,023	8,155,581	+ 493,558	+ 6.44
Paper and pulp	34	6,592,166	6,555,806	— 36,360	— 0.55
Sash, doors, blinds	73	5,002,045	5,260,706	+ 258,661	+ 5.17
Other industries	694	69,548,258	73,815,859	+ 4,267,601	+ 6.14
All industries	1,245	$155,152,906	$169,946,673	+ $14,793,767	+ 9.53

The total value of goods made and work done by these seven industries in 1896 was $85,604,648, increasing in 1897 to $96,130,814. This is an increase over 1896 of $10,526,166, or 12.30 per cent.

The value of their combined product is 55.17 per cent. of the total value of goods made and work done in all industries in 1896, and 56.57 per cent. in 1897.

They all show heavy increases in their product, with the exception of the paper and pulp industry, which shows the very slight decrease of 0.55 per cent.

The output in the lumber industry exhibits the greatest increase, being in value $3,720,398 more in 1897 than in 1896, or 20.30 per cent. The next greatest is flour and feed, showing an increase of $2,830,748, or 14.75 per cent.

The value of the leather product exceeded that of 1896 by

$1,708,015, or 12.70 per cent; lager beer by $1,551,146, or 10.07 per cent. Machines and machinery increased its value of goods made in 1897 by $493,558, or 6.44 per cent., and sash, doors and blinds show an increase for 1897 of $258,661 in its product, or 5.17 per cent.

In the other industries the amount of gain in 1897, as compared with 1896, was $4,267,601, or 6.14 per cent., and in all industries the increase, as before stated, was 9.53 per cent.

We present in the following analysis table a further comparison between the years 1896 and 1897 on the same subject of goods made, dividing the establiments into classes according to the value of goods made by them.

CLASSIFIED VALUE OF GOODS MADE.	CLASS.	NUMBER OF ESTABLISHMENTS.		AGGREGATE VALUE OF GOODS MADE IN SAID ESTABLISHMENTS.		INCREASE (+) OR DECREASE (—) IN 1897.		
		1896.	1897.	1896.	1897.	No. of establishm'ts.	Amount.	Percentages.
Establishments producing under $5,000	1	83	81	$270,647	$254,637	— 2	— $16,010	— 5.91
$5,000 but under $10,000	2	151	155	1,064,435	1,122,949	+ 4	+ 58,514	+ 5.49
10,000 but under 25,000	3	289	262	4,577,505	4,178,673	—27	— 398,832	— 8.71
25,000 but under 50,000	4	207	226	7,121,336	7,805,272	+19	+ 683,936	+ 9.60
50,000 but under 75,000	5	113	102	6,735,690	5,742,087	—11	— 993,603	—14.75
75,000 but under 100,000	6	73	70	6,165,977	5,999,755	— 3	— 166,222	— 2.69
100,000 but under 150,000	7	91	78	10,929,403	9,512,365	—13	— 1,417,038	—12.96
150,000 but under 200,000	8	62	66	10,448,779	11,073,398	+ 4	+ 624,519	+ 5.98
200,000 but under 300,000	9	73	72	17,886,455	17,127,864	— 1	— 758,591	— 4.24
300,000 but under 400,000	10	31	45	10,613,198	15,246,113	+14	+ 4,632,915	+43.65
400,000 but under 500,000	11	14	27	6,009,535	11,705,931	+13	+ 5,696,396	+94.79
500,000 but under 1,000,000	12	32	33	21,208,016	21,677,498	+ 1	+ 469,482	+ 2.21
1,000,000 but under 2,000,000	13	18	18	22,756,275	23,562.528	..	+ 806,253	+ 3.54
2,000,000 and over	14	8	10	29,365,655	34,937,603	+ 2	+ 5,571,948	+18.97
Totals	....	1,243	1,245	$155,152,906	$169,946,673	....	+$14,793,767	+ 9.53

The above table really explains itself, but we append a few analytical remarks.

It will be seen that the establishments are divided into fourteen classes, the lowest, or class one, including those that have turned out goods to the value of $5,000 or less, and the highest, or class fourteen, those having a product of $2,000,000 and over.

It is seen that many establishments changed, that is, either increased or decreased their product. The change seems to be largely from a smaller to a greater output.

Thus in class one there are two establishments less in 1897 than in 1896; in class three there are 27; in class five we find 11 less; class six shows three less, and class seven has 13 less than 1896. The increase of 19 in class four indicates that most of the establishments in class three increased their amount of finished product, so as to take their place in class four.

The greatest increase, however, we find in classes ten and eleven, where the number of establishments for the first mentioned show an increase of 14, and for the last mentioned 13. The increase in the amount of goods made in the establishments of class ten for the year 1897 was $4,632,915, or 43.65 per cent., and in class eleven for the same year the increase was $5,696,396, or 94.79 per cent.

In class fourteen two more establishments are noted for 1897 than was shown for 1896, and the increase in the amount of goods made was $5,571,948, or 18.97 per cent.

The combined output for all classes was, as has been already stated elsewhere, $155,152,906 for 1896, and $169,946,673 in 1897, showing an increase of $14,793,767, or 9.53 per cent.

PERSONS EMPLOYED.

The analysis tables relating to persons employed, wages, proportion of business done and days in operation are based upon the returns of 1,499 establishments, or 254 more establishments than were treated in the consideration of capital invested, stock used and goods made. The principal reason for this is that some of the industries added are not strictly engaged in manufacturing, but engage labor on a large scale.

Other industries engaged in manufacture, though of less importance, failed to return complete answers to all queries, mostly attributable to inadequate bookkeeping, but all returned the data pertaining to employment, wages, etc.

To arrive at the amount of employment in the different industries with as much accuracy as possible, the statistical inquiry and result is shown in three parts, the average number, the smallest number and the greatest number of persons employed. The difference between the two last named indicates the range of unemployment. The statistical tables in detail are found on pages 565 to 588.

The average number of persons employed in the 1,499 establishments was 80,051 in 1896, and 87,534 in 1897, an increase of 7,483 in the latter year.

The analytical table below shows the average number of persons employed in the seven industries treated before.

INDUSTRIES.	No. of establishments considered.	AVERAGE NUMBER OF PERSONS EMPLOYED DURING THE YEAR.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Number.	Per cent.
Flour and feed	86	1,095	1,132	+ 37	+ 3.38
Lager beer	71	3,133	3,108	— 25	— 0.79
Leather	33	4,340	4,754	+ 414	+ 9.54
Lumber, lath and shingles	168	11,542	11,827	+ 285	+ 2.47
Machines and machinery	86	4.317	4,486	+ 169	+ 3.91
Paper and pulp	34	3,117	3,152	+ 35	+ 1.12
Sash, doors, blinds, etc	73	3,207	3,507	+ 300	+ 9.35
Other industries	948	49,300	55,568	+ 6,268	+ 12.71
All industries	1,499	80,051	87,534	+ 7,483	+ 9.35

As will be seen, all the industries mentioned in the above table show an increase in 1897 in the average number of persons employed, with the exception of lager beer, showing a small numerical decrease of 25, or 0.79 per cent. The greatest increase is noted for leather, both in number and percentage, being a gain of 414, or 9.54 per cent. Sash, doors and blinds have the next greatest increase, being 300, or 9.35 per cent. In lumber, lath and shingles the increase was 285, or 2.47 per cent. Machines and machinery show a gain of 169, or 3.91 per cent., while in all the other industries, outside of those mentioned in the foregoing table, show an increase of 6,268 in the average number employed, or 12.71 per cent.

The percentage of increase for all industries is 9.35.

In the next table we present the same industries with the number of persons employed at periods of employment of the smallest number.

INDUSTRIES.	No. of establishments considered.	SMALLEST NUMBER OF PERSONS EMPLOYED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Number.	Per cent.
Flour and feed	86	1,025	1,108	+ 83	+ 8.10
Lager beer	71	3,032	2,984	— 48	— 1.58
Leather	33	4,075	4,201	+ 126	+ 3.11
Lumber, lath and shingles	168	6,313	5,195	— 1,118	— 17.71
Machines and machinery	86	3,792	4,201	+ 409	+ 10.78
Paper and pulp	34	2,774	2,893	+ 119	+ 4.29
Sash, doors, blinds, etc	73	2,716	2,788	+ 72	+ 2.65
Other industries	948	41,842	47,837	+ 5,995	+ 14.33
All industries	1,499	65,569	71,207	+ 5,638	+ 8.60

In saying the "smallest number of persons employed," it is meant the month when the establishments reported the smallest number of persons employed.

We again refer to the tables on pages 564–571, where the smallest and greatest number employed in the different industries are exhibited. By scrutinizing these two tables, the fluctuation in the matter of employment can there best be seen, and the range of unemployment determined.

There are, of course, some industries whose business is of such a nature that it gives them a busy and a dull season every year, with a correspondingly greater or lesser number of persons at work, but as a rule the range of non-employment in the different industries is quite clearly defined in the tables referred to.

In the industries indicated in the above table, we find that they all show an increase in 1897, except lager beer and lumber, which show a decrease, the first by a number of 48, or 1.58 per cent., the last mentioned by 1,118, or 17.71 per cent. Machines and machinery show the greatest increase, namely, 409, or 10.78 per cent. Flour and feed show a gain of 8.10 per cent, leather 3.11 per cent, paper and pulp 4.29 per cent., sash, doors, blinds, etc., 2.65 per cent., while the other industries show a numerical increase of 5,995, or 14.33 per cent., and in all industries together, as indicated on the last line, the increase over 1896 was 5,638, or 8.60 per cent.

The third and similar review on employment relates to the greatest number of persons employed during the same years, and again we present the group of seven industries:

INDUSTRIES.	NO OF ESTAB. CONSIDERED.	GREATEST NUMBER OF PERSONS EMPLOYED.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Number.	Pct.
Flour and feed	86	1,144	1,205	+ 61	+ 5.33
Lager beer	71	3,244	3,352	+ 108	+ 3.33
Leather	33	4,872	5,329	+ 457	+ 9.38
Lumber, lath and shingles	168	17,900	19,706	+ 1,806	+ 10.09
Machines and machinery	86	4,921	5,256	+ 335	+ 6.80
Paper and pulp	34	3,667	3,716	+ 49	+ 1.34
Sash, doors, blinds	73	3,714	4,015	+ 301	+ 8.10
Other industries	948	60,084	67,260	+ 7,176	+ 11.94
All industries	1,499	99,546	109,839	+ 10,293	+ 10.34

A glance at the last table will show that all the industries therein named show an increase in 1897 over 1896, that of lumber, etc., leading with a numerical gain of 1,806, or 10.09 per cent., leather coming next with 457, or 9.38 per cent., and the percentages for the balance ranging from 1.34 in paper and pulp to 8.01 per cent. in sash, doors, blinds, etc. In the other industries 7,176 more persons were employed in 1897 than in 1896, or 11.94 per cent., while all industries note a gain of 10,293 persons, or 10.34 per cent.

In connection with the foregoing tables we copy from pages 566–567, where presentations for comparison are made of the aggregate average number of persons employed in each industry, as well as the smallest and the greatest number. The following table for "all industries" is for the purpose of comparing the variation of employment between the years 1896 and 1897:

Comparative years.	Number of establishments considered.	Aggregates: Smallest number of persons employed.	Aggregates: Greatest number of persons employed.	Excess or range.
1896	1,499	65,569	99,546	33,977
1897	1,499	71,207	109,839	38,632

The number of persons who were out of employment for a longer or shorter period of time was larger by 4,655 in 1897, or, on the other hand, it can be said that 4,655 more persons were employed a longer or shorter period of time in the different industries in 1897 than in 1896.

However, it is clear that these persons, representing the difference between the smallest and the greatest number employed during the year, were not constantly employed in the industries named, but it does not therefore follow that they were wholly unemployed; it is only fair to infer that they were employed at some other occupation temporarily, or during the time of diminished business in their respective industries.

From pages 570–571, containing the table showing the average number of persons employed in each establishment by industries we bring out the average number of persons per establishment in "all industries" in the following table, and which will explain itself:

Comparative years.	Number of establishments considered.	Average number.	Smallest number.	Greatest number.	Excess greatest over smallest number.
1896	1,499	53	44	66	22
1897	1,499	58	48	73	25

The following table is reproduced from page 588, and shows the aggregate number of persons employed in each month during the two years. Upon pages 574 to 588 is found the employment by month for each industry, which together makes the aggregate number as seen in the table below. The average number of persons employed each month in each of the 1,499 establishments is also shows, being obtained by dividing the number of persons employed each month by the number of establishments.

MONTHS.	AGGREGATE NUMBER OF PERSONS EMPLOYED IN EACH MONTH.		AVERAGE NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT IN EACH MONTH.	
	1896.	1897.	1896.	1897.
January	75,014	75,546	50	50
February	77,074	77,760	51	52
March	78,234	80,498	52	54
April	84,465	87,483	57	58
May	87,441	92,322	58	62
June	87,911	92,732	59	62
July	86,326	92,330	58	62
August	83,545	92,567	56	62
September	79,353	92,678	53	62
October	77,451	92,973	52	62
November	74,739	88,218	50	59
December	70,800	83,259	47	56

The increase in the number of persons employed, both in the aggregate number as well as the average number by establishments, is quite marked, but the variation in each of the two years in the number employed month by month is noticeably very small. The lowest average for 1896 was 47 and the highest 59, while for 1897 the lowest was 50, and the highest 62. The general average number of persons employed per month in each establishment for the year 1896 was 5,375, and in 1897 it was 5,842, an increase of 467 persons per establishment, or 8.69 per cent. The highest average for 1896 is from April to August, inclusive, while for 1897 the high average runs from April to November, inclusive.

The range of employment and unemployment may be more plainly shown by percentages as below:

MONTHS.	PERCENTAGES OF EMPLOYMENT DURING THE MONTHS SPECIFIED.		PERCENTAGES OF UNEMPLOYED DURING THE MONTHS SPECIFIED.	
	1896.	1897.	1896.	1897.
January	85.33	81.26	14.67	18.74
February	87.67	83.64	12.33	16.36
March	88.99	86.58	11.01	13.42
April	96.08	94.10	3.92	5.90
May	99.47	99.30	0.53	0.70
June	100.00	99.74	....	0.26
July	98.20	99.31	1.80	0.69
August	95.03	99.56	4.97	0.44
September	90.27	99.68	9.73	0.32
October	88.10	100.00	11.90	....
November	85.02	94.89	14.98	5.11
December	80.54	89.55	19.46	10.45

The above table is based on all industries.

The month showing the highest number of persons employed is considered as 100 per cent., which, for 1896, was June, and for 1897, October. The percentages for the other months are obtained in their relative proportion thereto, and the difference between the correct percentage of employment and 100 represents the percentage of unemployment for that month.

Thus, for the month of December, 1896, we find the percentage of employment to be 80.54, and the percentage of unemployment correspondingly is 19.46, which, by the way, is the largest percentage of unemployment for said year.

The year 1897 shows a decidedly smaller percentage of unemployment than 1896, which fact has also been shown in other tables. The comparisons in the above table are so obvious as to render unnecessary any further analysis thereof.

The next presentation shows the relative proportion of the sexes employed in the different industries. On pages 574 to 588 will be found tables giving the number of persons employed by sex. We will here give it by percentages:

PERCENTAGES.

Industries.	Number of Persons Employed During the Year, by Sex.			
	1896.		1897.	
	Males.	Females.	Males.	Females.
Agricultural implements	99.95	0.05	99.94	0.06
Artisans' tools and hardware specialties	100.00	....	100.00	....
Beverages (not spirituous—soft drinks)	92.89	7.11	91.84	8.16
Bicycles, tricycles, etc	99.64	0.36	99.96	0.04
Boots and shoes	68.59	31.41	67.85	32.15
Boxes (wooden and paper)	71.31	28.69	71.56	28.44
Brick, tile and sewer pipe	100.00	....	100.00	....
Brooms, brushes and baskets	97.88	2.12	98.07	1.93
Burial cases, caskets, coffins, etc	81.02	18.98	76.40	23.60
Cement, lime, plaster, etc	99.46	0.54	99.52	0.48
Chairs	88.90	11.10	91.13	8.87
Chemical preparations	81.03	8.97	83.19	6.81
Cigars, snuff and tobacco	73.24	26.76	70.27	29.73
Clothing	20.16	79.84	19.75	80.25
Coal and wood	99.72	0.28	100.00	....
Confectionery, crackers, etc	51.04	48.96	46.84	53.16
Food Cooking and heating apparatus	99.30	0.70	99.43	0.57
Cooperage	100.00	....	100.00	....
Cotton and linen goods	38.14	61.86	40.43	59.57
Electrical and gas apparatus and supplies	95.54	4.46	95.72	4.28
Electrical and gas lighting, power and street railways	99.64	0.36	99.74	0.26
Fancy articles	81.69	18.31	83.51	16.49

PERCENTAGES—Continued.

DUSTRIES.	Number of Persons Employed During the Year, by Sex.			
	1896.		1897.	
	Males.	Females	Males.	Females.
Flour and feed	99.49	0.51	99.51	0.49
Food preparations	89.07	10.93	82.49	17.51
Furniture	97.72	2,28	98.63	1.37
Furs, gloves and mittens	44.83	55.17	39.26	60.74
Grain and warehouse men	99.61	0.39	100.00	....
Iron goods (malleable)	100.00	....	99.51	0.49
Iron (pig)	100.00	....	100.00	....
Knit goods	16.22	83.78	18.81	81.19
Lager beer	89.43	10.57	90.29	9.71
Laundries	24.71	75.29	25.32	74.68
Leather	94.74	5.26	94.24	5.76
Lithographing and engraving	91.85	8.15	92.69	7.31
Lumber lath and shingles	99.35	0.65	99.46	0.54
Malt	100.00	....	100.00	....
Machines and machinery	99.64	0.36	99.60	0.40
Mixed textiles	43.19	56.81	44.31	55.69
Office and saloon fixtures, etc	100.00	....	100.00	....
Paints, oils and crude chemicals	99.16	0.84	99.29	0.71
Paper and pulp	79.97	20.03	80.03	19.97
Printers' supplies	96.78	3.22	96.67	3.33
Railway equipment	99.86	0.14	99.95	0.05
Saddlery, harness, etc	84.13	15.87	85.53	14.47
Sash, doors, blinds and mouldings	98.85	1.15	98.82	1.18
Sheet metal goods	85.94	14.06	82.34	17.66
Ship and boat building	99.76	0.24	99.75	0.25
Soap, lye, potash, etc	71.62	28.38	70.48	29.52
Staves and heading	100.00	....	100.00	....
Stone, (marble, granite, etc.)	100.00	....	100.00	....
Straw goods	43.31	56.69	49.96	50.04
Toys and games	89.16	10.84	90.34	9.66
Trunks, valises, etc	93.38	6.62	91.29	8.71
Veneer	99.66	0.34	100.00	....
Wagons, carriages and sleighs	97.87	2.13	98.36	1.64
Woodenware	99.69	0.31	99.99	0.01
Woolen and worsted goods	40.37	59.63	42.44	57.56
Miscellaneous	56.26	43.74	54.41	45.59
All industries	88.43	11.57	89.03	10.97

A comparison of the percentages in the above table will indicate the average relative proportion of males and females at work in the stated industries for the two years, as well as the changes that have occurred in said proportion in the stated period.

In reviewing the above table we find for both years that in nine industries, or 15.52 per cent. of all the industries, female help largely predominates. Thus, the clothing industry shows an average of about 80 per cent. of all employes to be females; confectionery, crackers, etc., about 51 per cent; cotton and linen goods, about 61 per cent.; furs, gloves, etc., about 58 per cent.;

knit goods, about 82½ per cent.; laundries, about 75 per cent.; mixed textiles, about 56 per cent.; straw goods, about 53 per cent., and woolen and worsted goods, about 59 per cent.

Other industries where the proportions of female employes range from 28 per cent. to 45 per cent., are five in number; boots and shoes, about 32 per cent.; boxes, about 28 per cent.; cigars, etc., about 28 per cent.; soap, lye, etc., about 29 per cent., and miscellaneous, about 45 per cent. Nine industries, where the proportion of female employes are shown to be from 10 to 21 per cent. of the whole number of persons employed, are: Burial cases, etc., chairs, fancy articles, food preparations, lager beer, paper and pulp, saddlery, harness, etc., sheet metal goods, and toys and games. Eleven industries have less that 10, but more than 1 per cent. of females employed.

It will also be seen that in some industries no females are employed. Of such there were nine in 1896 and eleven in 1897. In thirty-one industries the relative proportion of the sexes practically remained unchanged in the two years, the difference ranging from 0.01 per cent. to 0.91 per cent.; in other words, the change in no case reached 1 per cent.

In this slight variation of the thirty-one industries mentioned, nine showed an increase and twenty-two a decrease. Nine industries show an increased number of female help in 1897. over 1896, ranging from 6.58 per cent. in food preparations, to 1.05 per cent. in beverages (not spiritous). The increases in other industries being, burial cases, caskets, etc., 4.62 per cent.; cigars and tobacco, 2.97 per cent.; confectionery, etc., 4.20 per cent.; furs, gloves, etc., 5.57 per cent.; sheet metal goods, 3.60 per cent.; trunks, valises, etc., 2.09 per cent., and miscellaneous, 1.85 per cent.

Decreases in the same period are shown in 10 industries, varying from 6.65 per cent. in straw goods, down to 1.14 per cent. in soap, lye, etc. The balance are chemical preparation, showing 2.16 per cent.; chairs, 2.23 per cent.; cotton and linen goods, 2.29 per cent.; fancy articles, 1.82 per cent.; knit goods, 2.59 per cent.; saddlery, etc., 1.40 per cent.; toys and games, 1.18 per cent., and woolen and worsted goods, 2.07 per cent.

WAGES PAID.

The tables appertaining to wages will be found on pages 589 and 622, and include total wages paid by industries, average yearly earnings and classified weekly wages.

It is well to remember that wage-earners only are considered in the wage tables; amounts paid to clerks, bookkeepers, etc., are not included.

In the following table we reproduce the amount of wages paid in the seven industries presented heretofore, as well as the total amount of wages paid in all industries.

INDUSTRIES.	No. of establishments considered.	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	1896.	1897.
Flour and feed	86	$547,830	$586,731	+ $38,901	+ 6.73
Lager beer	71	1,649,640	1,686,468	+ 36,828	+ 2.23
Leather	33	1,790,571	2,028,342	+ 237,771	+ 13.28
Lumber, lath and shingles	168	3,904,245	4,566,264	+ 662,019	+ 16.95
Machines and machinery	86	2,195,742	2,343,671	+ 147,929	+ 6.73
Paper and pulp	34	1,243,243	1,240,476	— 2,767	— 0.22
Sash, doors, blinds, etc.	73	1,086,510	1,159,449	+ 72,939	+ 6.71
Other industries	948	19,332,041	22,971,643	+3,639,602	+ 18.83
All industries	1,499	31,749,822	36,583,044	4,833,222	+ 15.22

The total amount paid in wages in "all industries" for the year 1896 was $31,749,822, and for 1897 it was $36,583,044, a gain of $4,833,222, or 15.22 per cent. All of the industries referred to in the above table show an increase in the amount of wages paid, with the exception of paper and pulp, which shows the slight decrease of 0.22 per cent. The greatest gain was in lumber, both in amount and percentage, being $662,019, or 16.95 per cent. Leather comes next, with an increase of $237,711, or 13.28 per cent. Flour and feed, and machines and machinery each show a percentage of increase of 6.73, while sash, doors, etc., was nearly the same, or 6.71 per cent., and lager beer shows an increase of 2.23 per cent.

In the industries, other than the seven enumerated, the increase was $3,639,602, or 18.83 per cent.

AVERAGE YEARLY EARNINGS.

The average yearly earnings in the same seven industries, with the average for all industries, are brought forward in the next table:

INDUSTRIES.	No. of establishments considered.	AVERAGE YEARLY EARNINGS.		INCREASE (+) OR DECREASE (−) IN 1897.	
		1896.	1897.	1896.	1897.
Flour and feed	86	$500.30	$518.31	+ $18.01	+ 3.59
Lager beer	71	526.54	542.62	+ 16.08	+ 3.05
Leather	33	412.57	426.66	+ 14.09	+ 3.41
Lumber, lath and shingles	168	338.26	386.09	+ 47.83	+ 14.14
Machines and machinery	86	508.63	522.44	+ 13.81	+ 2.71
Paper and pulp	34	398.85	393.71	— 5.14	— 1.30
Sash, doors, blinds, etc	73	338.79	330.61	— 8.18	— 2.41
Other industries	948	392.13	413.40	+ 21.27	+ 5.42
All industries	1,499	$386.63	$416.79	+ $30.16	+ 7.80

Average yearly earnings are obtained by dividing the total amount of wages paid in each industry by the aggregate average number of persons employed therein, without discrimination as to sex or age. Where returns similar to those from which these tables are derived are received each year, the averages, like the above, are useful in comparison, and from that standpoint show the relative condition in each year.

The average yearly earnings in "all industries," as shown by the final line in the above table, was $386.63 in 1896, and $416.79 in 1897, a gain of $30.16, of 7.80 per cent.

Among the seven industries considered, paper and pulp, and sash, doors, etc., show a slight decrease, being 1.30 per cent. for the first and 2.41 per cent. for the last mentioned.

The lumber industry shows the greatest increase in the yearly earnings per employe, being 14.14 per cent. In flour and feed the gain was 3.59 per cent.; lager beer, 3.05 per cent.; leather, 3.41 per cent.; machines and machinery, 2.71 per cent., and in the other industries the increase in the aggregate was 5.42 per cent.

It should be borne in mind that these average yearly earnings do not altogether indicate the *rate* of wages, as many contingencies may affect these averages. They should be closely compared with the data respecting the number of persons employed, the length of time in operation, the employment of a larger number of females and minors in one year, as compared with another, for all these different elements have an important bearing upon the average yearly earnings. They should, therefore, be carefully considered before any deductions are drawn from them.

When the industries are compared with one another, wide differences appear in the average amount of yearly earnings.

In industries showing the highest averages it is usually found that male adults are largely employed, and in other cases the difference may be ascribed to the relative degree of skill required in the different industries.

On the other hand, where the lower averages of yearly earnings are found it is generally in industries where the manufacture permits the employment of a large proportion of females and young persons.

To more fully demonstrate the points above referred to, the following table is brought out.

The average yearly earnings in each industry for the years 1896 and 1897, together with the proportions of males and females employed therein during the same period, are presented. With the facts above referred to and an examination of the table itself, a further review of it is unnecessary.

INDUSTRIES.	AVERAGE YEARLY EARNINGS.	PERCENTAGE OF NUMBER OF PERSONS EMPLOYED DURING THE YEAR BY SEX.		AVERAGE YEARLY EARNINGS.	PERCENTAGE OF NUMBER OF PERSONS EMPLOYED DURING THE YEAR BY SEX.	
		1896.			1897.	
	1896.	Males.	Females.	1897.	Males.	Females.
Agricultural implements	$538.70	99.95	0.05	$503.18	99.94	0.06
Artisans' tools and hardware specialties	474.38	100.00	....	412.20	100.00	....
Beverages (not spirituous, soft drinks)	444.43	92.89	7.11	456.23	91.84	8.16
Bicycles, tricycles, etc	453.19	99.64	0.36	494.97	99.96	0.04
Boots and shoes	278.07	68.59	31.41	298.81	67.85	32.15
Boxes (wooden and paper)	281.32	71.31	28.69	302.97	71.56	28.44
Brick, tile and sewer pipe	284.27	100.00	....	284.38	100.00	....
Brooms, brushes, and baskets	290.45	97.88	2.12	301.87	98.07	1.93
Burial cases, caskets, coffins, etc	328.46	81.02	18.98	350.25	76.40	23.60
Cement, lime, plaster, etc	500.04	99.46	0.54	448.75	99.52	0.48

INDUSTRIES.	AVERAGE YEARLY EARNINGS.	PERCENTAGE OF NUMBER OF PERSONS EMPLOYED DURING THE YEAR, BY SEX.		AVERAGE YEARLY EARNINGS.	PERCENTAGE OF NUMBER OF PERSONS EMPLOYED DURING THE YEAR, BY SEX.	
		1896.			1897.	
	1896.	Males.	Females.	1897.	Males.	Females.
Chairs	278.27	88.90	11.10	288.70	91.13	8.87
Chemical preparations	621.15	81.03	18.97	686.38	83.19	16.81
Cigars, snuff and tobacco	459.22	73.24	26.76	462.05	70.27	29.73
Clothing	290.16	20.16	79.84	328.54	19.75	80.25
Coal and wood	453.35	99.72	0.28	499.95	100.00	....
Confectionery, crackers, etc	334.00	51.04	48.96	358.16	46.84	53.16
Cooking and heating apparatus	360.36	99.30	0,70	367.82	99.43	0.57
Cooperage	344.63	100.00	....	339.84	100.00	....
Cotton and linen goods	202.44	38.14	61.86	244.71	40.43	59.57
Electrical and gas apparatus and supplies	467.13	95.54	4.46	475.75	95.72	4.28
Electrical and gas lighting power and street railway	587.87	99.64	0.36	631.75	99.74	0.26
Fancy articles	302.97	81.69	18.31	324.80	83.51	16.49
Flour and feed	500.30	99.49	0.51	518.31	99.51	0.49
Food preparations	430.23	89.07	10.93	424.40	82.49	17.51
Furniture	293.35	97.72	2.28	298.14	98.63	1.37
Furs, gloves and mittens	341.04	44.83	55.17	320.54	39.26	60.74
Grain and warehouse men	603.25	99.61	0.39	584.58	100.00	....
Iron goods (malleable)	447.69	100.00	....	453.36	99.51	0.49
Iron (pig)	381.48	100.00	....	366.72	100.00	....
Knit goods	202.00	16.22	83.78	228.11	18.81	81.19
Lager beer	526.54	89.43	10.57	542.62	90.29	9.71
Laundries	288.00	24.71	75.29	296.01	25.32	74.68
Leather	412.57	94.74	5.26	426.66	94.24	5.76
Lithographing and engraving	473.00	91.85	8.15	504.90	92.69	7.31
Lumber, lath and shingles	338.26	99.35	0.65	386.09	99.46	0.54
Malt	568.25	100.00	....	576.71	100.00	....
Machines and machinery	508.63	99.64	0.36	522.44	99.60	0.40
Mixed textiles	219.70	43.19	56.81	221.85	44:31	55.69
Office and saloon fixtures, etc	409.77	100.00	....	410.41	100.00	....
Paints, oils and crude chemicals	518.00	99.16	0.84	576.46	99.29	0.71
Paper and pulp	398.85	79.97	20.03	393.71	80.03	19.97
Printers' supplies	373.83	96.78	3.22	377.64	96.67	3.33
Railway equipment	562.68	99.86	0.14	564.11	99.95	0.05
Saddlery, harness, etc	344.24	84.13	15.87	382.03	85.53	14.47
Sash, doors, blinds and mouldings	338.79	98.85	1.15	330.61	98.82	1.18
Sheet metal goods	360.11	85.94	14.06	304.15	82.34	17.66
Ship and boat building	528.85	99.76	0.24	422.19	99.75	0.25
Soap, lye, potash, etc	377.34	71.62	28.38	434.54	70.48	29.52
Staves and heading	267.67	100.00	....	301.06	100.00	....
Stone, (marble, granite, etc.)	461.17	100.00	....	460.19	100.00	....
Straw goods	348.09	43.31	56.69	345.72	49.96	50.04
Toys and games	259.95	89.16	10.84	271.44	90.34	9.66
Trunks, valises, etc	308.96	93.38	6.62	321.15	91.29	8.71
Veneer	296.22	99.66	0.34	310.42	100.00	....
Wagons, carriages and sleighs	353.50	97.87	2.13	401.37	98.36	1.64
Wodenware	318.51	99.69	0.31	318.17	99.99	0.01
Woolen and worsted goods	265.98	40.37	59.63	295.97	42.44	57.56
Miscellaneous	330.40	56.26	43.74	350.55	54.41	45.59
All industries	$386.63	88.43	11.57	$416.79	89.03	10.97

In connection with the table above, we present a classification of the different industries according to the yearly amount of wages earned per employe. They are formed into groups according to their class, that is, the yearly amount they enable their employes to earn, showing the number and per cent. of all, together with the numerical increase or decrease in 1897.

The table is self explanatory and we present it without further comment:

INDUSTRIES.	NUMBER OF INDUSTRIES.		PER CENT. OF INDUSTRIES.		Amount of earnings per year per employe.	Numerical increase (+) or decrease (—) in indust., '97.
	1896.	1897.	1896.	1897.		
1896—Chemical prep'ns, grain and warehousemen. 1897—Chemical prep'ns, elect. and gas lighting and st. ry's	. 2	2	3.45	3.45	$600 and over...........	* =
1896—Agr. impl't, elect. lighting and st. ry's, cement, etc., flour, lager beer, malt, machines and machinery, paints, etc., r'y equipment, ship building. 1897—Agr. impl't, flour, lager beer, malt, machines and machinery, paint, etc., ry. equip'mt, grain and warehousemen, lithographing and engraving..............	10	9	17.24	15.52	$500 and over...........	— 1
1896—Artisans' tools, etc., bicycles, etc., cigars, etc., coal and wood, elect'cl supp'ies, lithographing and stone. 1897—Bicycles, etc , cigars, etc., coal and wood, elect'cl supplies, stone, soft beverages, iron (mal.).................	7	7	12.07	12.07	$450 but less than $500..	=
1896—Soft beverages, food preparations, iron (malleable), leather, office and saloon fixtures. 1897—Food prep'ns, leather, office and saloon fixtures, artisans' tools, etc., cement, etc., ship building, soap, etc., wagons, etc........ ...	5	8	8.62	13.79	$400 but less than $450..	+ 3
1896—Cooking and heating apparatus, iron (pig), paper, etc., printers' suppl's, sheet metal goods, soap, lye, etc., wagons, etc 1897—Cooking and heating apparatus, iron (pig), paper, etc., printers' supplies, burial cases, etc., confectionery, lumber, etc., saddlery, etc., miscellaneous...	7	9	12.07	15.52	$350 but les 400..	+ 2
1896—Burial cases, etc., confectionery, cooperage, fancy articles, furs, etc., lumber, etc., saddlery, etc., sash, doors, etc., straw goods, trunks, etc., woodenware, miscellaneous. 1897—Cooper'ge, fancy articles, furs, etc., sash, doors, etc., straw goods, trunks, etc., woodenware, boxes, brooms, clothing, sheet metal goods, stoves, etc., veneer.........	12	13	20.69	22.41	$300 but less than $350..	+ 1

INDUSTRIES.	NUMBER OF INDUSTRIES.		PER CENT. OF INDUSTRIES.		Amount of earnings per year per employe.	Numerical increase (+) or decrease (−) in indust., '97.
	1896.	1897.	1896.	1897.		
1896—Boots, etc., boxes, brick, etc., brooms, etc., chairs, clothing, furniture, laundries, staves and heading, toys and games, veneer, woolen and worsted goods. 1897—Boots, etc., brick, etc., chairs, furniture, laundries, toys and games, woolen and worsted goods.	12	7	20.69	12.07	$250 but less $300..	− 5
1896—Cotton and L. goods, knit goods, mixed textiles. 1897—Cotton and L. goods, knit goods, mixed textiles.......	3	3	5.17	5.17	Less than $250..........	=
All industries.............	58	58	100.00	100.00		

* (=) No change.

The tables containing the classified weekly wages for each industry, and the number of persons, classified as to sex and age, receiving same for the years of 1896 and 1897 are found on pages 593-622.

The following table shows the classified wage presentation for "all industries," but instead of numbers we make use of percentages:

CLASSIFICATION OF WEEKLY WAGES.	PERCENTAGES OF WAGES PAID, BY SEX.							
	1896.				1897.			
	Males 18 years and over.	Females 18 years and over.	Males under 18 years.	Females under 18 years.	Males 18 years and over.	Females 18 years and over.	Males under 18 years.	Females under 18 years.
$25.00 per week and over...........	100.00	......	......	......	100.00	......	......	......
20.00 but under $25.00...............	100.00	......	......	......	100.00	......	......	......
18.00 but under 20.00...............	100.00	......	......	......	100.00	......	......	......
15.00 but under 18.00...............	100.00	......	......	......	100.00	......	......	......
13.00 but under 15.00...............	100.00	......	......	......	100.00	......	......	......
12.00 but under 13.00...............	99.98	0.02	......	......	100.00	......	......	......
11.00 but under 12.00...............	98.74	1.26	......	......	97.62	2.38	......	......
10.00 but under 11.00...............	98.92	1.08	......	......	98.80	1.20	......	......
9.00 but under 10.00...............	99.16	0.84	......	......	99.18	0.82	......	......
8.00 but under 9.00...............	98.64	1.36	......	......	98.08	1.92	......	......
7.00 but under 8.00...............	97.54	2.01	0.45	......	96.67	2.02	0.88	0.43
6.00 but under 7.00...............	89.52	8.01	2.23	0.24	88.14	8.25	3.27	0.34
5.50 but under 6.00...............	61.49	27.12	9.48	1.91	71.22	18.15	10.11	0.52
5.00 but under 5.50...............	39.08	47.95	10.64	2.33	51.98	34.31	12.71	1.00
4.50 but under 5.00...............	32.84	37.73	25.24	4.19	26.74	34.66	34.73	3.87
4.00 but under 4.50...............	25.38	36.45	31.39	6.78	15.23	36.57	39.32	8.88
3.50 but under 4.00...............	16.10	37.54	29.72	16.64	9.47	16.29	56.65	17.59
3.00 but under 3.50...............	22.75	25.66	36.06	15.53	3.58	21.76	54.24	20.42
2.50 but under 3.00...............	7.88	16.38	44.24	31.55	......	13.15	55.44	31.41
2.00 but under 2.50...............	7.89	14.81	42.05	35.25	......	15.70	52.81	31.49
1.50 but under 2.00...............	5.56	15.74	31.48	47.22	......	15.12	27.17	57.71
Under $1.50	......	2.22	13.34	84.44	......	10.46	3.49	86.05
Totals	83.31	8.27	5.89	2.53	80.81	7.11	8.99	3.09

From the percentages in the above table it is seen that females did not share in weekly wages above $12 in 1896, nor above that of $11 in 1897. Employes under 18 years of age did not exceed the classification of $7, but under $8 per week, in any of the two years.

The percentage of males over 18 years of age received the greater proportion of wages in each class over that of $5.50, but under $6 per week in 1896, and that of $5, but under $5.50, per week in 1897. A greater number of females over 18 years of age received wages at the rate of $5, but under $5.50, per week in 1896 than in any other single rate, being 47.95 per cent. of all who received the same pay, males over 18 years of age being credited with 39.08 per cent., males under 18 years with 10.64 per cent., and females under 18 years with 2.33 per cent.

The greatest percentage reached for females over 18 years of age in 1897 was in the class of $4.50, but under $5 per week, it being 34.66 per cent. In the same class males over 18 years received 26.74 per cent.; males under 18 years received 34.73 per cent., and females under 18 years 3.87 per cent.

The largest percentages in the lower wage classes are, of course, found against persons under 18 years of age.

To show the fluctuations in the different wage classes, we present the following analysis table. All industries are included. In this table the total number of wage-earners in each classification, that is, males over 18 years, females over 18, males under 18 and females under 18, is considered severally as representing 100 per cent., and the number of employes in each wage class constitute parts of this total, that is, they are represented by percentages which make a total of 100.

Classification of Weekly Wages.	Percentages of Wages Paid, by Sex.							
	1896.				1897.			
	Males 18 years and over.	Females 18 years and over.	Males under 18 years.	Females under 18 years.	Males 18 years and over.	Females 18 years and over.	Males under 18 years.	Females under 18 years.
(All Industries.)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
$25.00 per week and over	1.27	......	......	......	1.08	......	......	......
20.00 but under $25.00	1.88	......	......	......	2.08	......	......	......
18.00 but under 20.00	1.83	......	......	......	2.03	......	......	......
15.00 but under 18.00	4.89	......	......	......	4.78	......	......	......
13.00 but under 15.00	4.81	......	......	......	5.23	......	......	......
12.00 but under 13.00	7.13	0.01	......	......	8.88	......	......	......
11.00 but under 12.00	3.46	0.44	......	......	3.98	1.10	......	......
10.00 but under 11.00	7.29	0.80	......	......	7.58	1.04	......	......
9.00 but under 10.00	21.21	1.80	......	......	17.82	1.66	......	......
8.00 but under 9.00	11.55	1.59	......	......	12.79	2.86	......	......
7.00 but under 8.00	17.18	3.56	1.12	......	18.15	4.33	1.49	1.98
6.00 but under 7.00	10.46	9.42	3.68	0.93	9.77	10.42	3.27	0.97
5.50 but under 6.00	1.66	7.38	3.62	1.69	1.88	5.44	2.39	0.36
5.00 but under 5.50	1.45	18.03	5.62	2.87	1.54	11.58	3.38	0.78
4.50 but under 5.00	1.39	16.12	15.14	5.85	1.48	20.73	16.43	5.32
4.00 but under 4.50	0.74	10.69	12.94	6.50	0.59	16.15	13.71	9.02
3.50 but under 4.00	0.58	13.73	15.27	19.91	0.27	5.68	15.53	14.05
3.00 but under 3.50	0.95	10.82	21.33	21.41	0.17	11.61	22.85	25.04
2.50 but under 3.00	0.17	3.48	13.25	32.02	......	3.69	12.31	20.32
2.00 but under 2.50	0.09	1.70	6.75	13.17	......	2.83	7.53	13.08
1.50 but under 2.00	0.01	0.42	1.18	4.12	......	0.76	1.08	6.68
Under $1.50	......	0.01	0.10	1.53	......	0.12	0.03	2.40

It will be seen that the greatest percentage of males over 18 years of age received $9 but under $10 per week in 1896, being represented by 21.21 per cent., while the percentage of that wage class was 0.33 per cent. below that of $7 but under $8 per week in 1897, which class for that year shows the highest percentage.

For females over 18 years of age, $5 but under $5.50 per week appears to represent the highest percentage for 1896, being 18.03 per cent.; but in 1897 a greater number received a weekly wage of $4.50 but under $5 per week, being represented by 20.73 per cent.

For males under 18 years of age $3 but under $3.50 per week seems to have been most commonly paid during both years, a greater number receiving that than any other wage class. The percentage for 1896 being 21.33 per cent., increasing in 1897 to 22.85 per cent.

The greatest percentage for females under 18 years of age in any wage class for 1896 was 22.02, for $2.50 but under $3 per week; but for 1897 the greatest percentage is changed for $3 but under $3.50 per week, being 25.04 per cent.

The next and final table in relation to wages is a classification of weekly wages for 1896 and 1897, embracing all industries, the number of persons receiving wages in each specified class and the percentage each class bears to the total number of persons employed in all industries, as follows:

Classification of Weekly Wages.	1896.		1897.	
	No.	Per cent	No.	Per cent.
$25.00 and over—Male over 18 years	1,030	1.07	861	0.86
20.00 but under $25.00—Male over 18 years	1,533	1.56	1,674	1.68
18.00 but under 20.00—Male over 18 years	1,496	1.53	1,632	1.63
15.00 but under 18.00—Male over 18 years	3,990	4.08	3,860	3.87
13.00 but under 15.00—Male over 18 years	3,924	4.09	4,194	4.20
$12.00 but under $13.00—				
Male over 18 years	5,819	5.94	7,156	7.17
Female over 18 years	1	....	......	....
$11.00 but under $12.00—				
Male over 18 years	2,823	2.89	3,193	3.20
Female over 18 years	36	0.03	78	0.08
$10.00 but under $11.00—				
Male over 18 years	5,948	6.07	6,117	6.13
Female over 18 years	65	0.07	74	0.07
$9.00 but under $10.00—				
Male over 18 years	17,292	17.67	14,357	14.39
Female over 18 years	146	0.15	118	0.12
$8.00 but under $9.00—				
Male over 18 years	9,380	9.58	10,321	10.35
Female over 18 years	129	0.13	202	0.20
$7.00 but under $8.00—				
Male over 18 years	14,007	14.31	14,633	14.68
Female over 18 years	288	0.29	307	0.31
Male under 18 years	65	0.07	133	0.13
Female under 18 years	....	....	61	0.06
$6.00 but under $7.00—				
Male over 18 years	8,526	8.71	7,878	7.89
Female over 18 years	763	0.78	738	0.75
Male under 18 years	212	0.22	293	0.29
Female under 18 years	23	0.02	30	0.03
$5.50 but under $6.00—				
Male over 18 years	1,356	1.37	1,515	1.53
Female over 18 years	598	0.61	386	0.38
Male under 18 years	209	0.21	215	0.21
Female under 18 years	42	0.04	11	0.01
$5.00 but under $5.50—				
Male over 18 years	1,190	1.22	1,244	1.25
Female over 18 years	1,460	1.49	821	0.83
Male under 18 years	324	0.33	304	0.31
Female under 18 years	71	0.07	24	0.03
$4.50 but under $5.00—				
Male over 18 years	1,136	1.16	1,135	1.14
Female over 18 years	1,305	1.33	1,471	1.48
Male under 18 years	873	0.90	1,474	1.48
Female under 18 years	145	0.15	164	0.16
$4.00 but under $4.50—				
Male over 18 years	603	0.62	477	0.48
Female over 18 years	866	0.88	1,145	1.15
Male under 18 years	746	0.76	1,231	1.24
Female under 18 years	161	0.16	278	0.28

Classification of weekly wages.	1896.		1897.	
	No.	Per cent.	No.	Per cent.
$3.50 but under $4.00—				
Male over 18 years	477	0.48	233	0.23
Female over 18 years	1,112	1.13	401	0.40
Male under 18 years	880	0.91	1,394	1.39
Female under 18 years	493	0.50	433	0.43
$3.00 but under $3.50—				
Male over 18 years	776	0.79	135	0.14
Female over 18 years	875	0.89	823	0.83
Male under 18 years	1,230	1.26	2,051	2.05
Female under 18 years	530	0.54	772	0.77
$2.50 but under $3.00—				
Male over 18 years	136	0.14	....	....
Female over 18 years	282	0.28	262	0.26
Male under 18 years	764	0.78	1,105	1.11
Female under 18 years	545	0.57	626	0.63
$2.00 but under $2.50—				
Male over 18 years	73	0.08	....	....
Female over 18 years	137	0.14	201	0.20
Male under 18 years	389	0.39	676	0.69
Female under 18 years	326	0.33	408	0.40
$1.50 but under $2.00—				
Male over 18 years	12	0.01	....	....
Female over 18 years	34	0.03	54	0.65
Male under 18 years	68	0.06	97	0.09
Female under 18 years	102	0.11	206	0.21
Under $1.50—				
Female over 18 years	1	....	9	....
Male under 18 years	6	....	3	....
Female under 18 years	38	0.04	74	0.07
Totals	97,867	100.00	99,753	100.00

The above table shows that in 1896 the greatest number of persons employed received a wage of $9 but under $10 per week, as has already been stated in a preceding analysis. In 1897, however, the greatest number of persons received a wage of $7 but under $8 per week, the number receiving $9 but under $10 per week being a close second. The sharp decrease in 1897 in the number of persons receiving $9 but under $10 per week is probably to some extent accounted for in the increased number of persons receiving more than $9 per week in said year.

The above table also reveals that in 1896, 44,103 persons received in weekly wages from $9 to $25 and over, and in 1897, 43,314 persons did the same. This is 45.06 per cent. of all persons employed in 1896, and 43.42 per cent in 1897, or, in other words, nearly half of all the persons employed received from $9 to $25 and over per week for both years.

In the smaller weekly wages, or from $5 per week and down, females and the young persons largely predominate.

The analysis given the last two preceding tables is also more or less applicable to the table above.

PROPORTION OF BUSINESS DONE.

The industry presentation relating to the proportion of business done is found in a table on page 623.

In computing the proportion of business done in any industry, the total productive capacity of the establishments comprising such industry, with their present facilities for turning out goods, is made the basis, and this greatest capacity is called 100 per cent. An establishment turning out goods equal to three-quarters of this greatest capacity, the proportion of business done would be called 75 per cent., and if the product reached only one-half of what could be turned out it would be considered 50 per cent.

It will be seen that the average proportion of business done in all industries, comprising 1,499 establishments, was 69.53 per cent. in 1896, and 71.80 per cent. in 1897, an increase of 2.27 per cent.

To further show in a consise way the difference in the average proportion of business done in the different industries, and for a better comparison of the two years under consideration, we present a classification of percentages indicating the proportion of business done, the number of industries in each group or class, and the relative percentages which such group or class bears to the total number of industries, as follows:

CLASSIFICATION.	NUMBER OF INDUSTRIES.		Percentages.	
	1896.	1897.	1896.	1897.
Under 60.00 per cent	9	3	15.79	5.26
60.00 but under 70.00 per cent	15	17	26.31	29.83
70.00 but under 80.00 per cent	25	32	43.86	56.14
80.00 but under 90.00 per cent	6	4	10.53	7.02
90.00 per cent. and over	2	1	3.51	1.75
Totals	57	57	100.00	100.00

From the above table it is seen that the class reporting the average proportion of business done to be 70 but under 80 per cent. includes more industries than any of the others, being 43.86 per cent. of all industries in 1896, and 56.14 per cent in 1897. A sharp decrease is noted in the class "under 60 per cent.," there being nine industries in this class in 1896, or 15.79 per cent. of all, dropping to three industries in 1897, representing 5.26 per cent.

Combining the three classes showing the highest percentage, we find that they represent 57.90 per cent. of all industries in 1896, and 64.91 per cent. in 1897.

The average proportion of business done in the seven specified industries is brought forward in the following table:

INDUSTRIES.	No. of establishments considered.	AVERAGE PROPORTION OF BUSINESS DONE.		INCREASE (+) OR DECREASE (—) IN 1897.	
		1896.	1897.	Proportion	Percentage
Flour and feed	86	70.37	75.27	+ 4.90	+ 6.96
Lager beer	71	61.35	64.34	+ 2.99	+ 4.87
Leather	33	73.69	79.61	+ 5.92	+ 8.03
Lumber, lath and shingles	168	61.20	70.00	+ 8.80	+ 14.37
Machines and machinery	86	64.84	68.01	+ 3.17	+ 4.88
Paper and pulp	34	83.20	83.00	— 0.20	— 0.24
Sash, doors, blinds, etc	73	66.25	69.76	+ 3.51	+ 5.29
Other industries*	928	69.55	71.65	+ 2.10	+ 3.02
All industries	1,479	69.53	71.80	+ 2.27	+ 3.26

* Railway equipment omitted.

With the exception of paper and pulp, which shows the slight decrease of 0.20 per cent. in proportion of business done, all the industries in the above table show a gain over 1896, the greatest of which is found in lumber, lath, etc., it being 8.80 per cent. Leather comes next, with 5.92 per cent., and flour and feed with 4.90 per cent. The increase in the lager beer industry is the lowest in the group, being 2.99 per cent. The other industries, aside from the seven, indicate 2.10 per cent. increase, and for all industries 2.27 per cent.

DAYS IN OPERATION.

The table containing the statistical information in relation to the average number of days in operation is found on page 625.

From that page we reproduce the final lines, showing that the average number of days in operation for all industries was 263.40 in 1896, and 270.81 in 1897, an increase of 7.41 days.

For the purpose of further comparison of the time in operation in the several industries, we present the following condensed table.

The time in operation is arranged into classes or groups with the number of industries belonging in each group, and the relative percentages which each group bears to the total number of industries, as follows:

CLASSIFICATION OF DAYS IN OPERATION.	NUMBER OF INDUSTRIES.		PERCENTAGES.	
	1896.	1897.	1896.	1897.
Under 200 days	3	2	5.17	3.45
200 days but under 230 days	5	2	8.62	3.45
230 days but under 250 days	11	7	18.96	12.07
250 days but under 270 days	9	11	15.52	18.96
270 days but under 290 days	19	23	32.76	39.66
290 days but under 300 days	4	7	6.90	12.07
300 days and over	7	6	12.07	10.34
Totals	58	58	100.00	100.00

In the foregoing table we find the industries that were in operation from 270 to 290 days to be the most numerous in both years. In 1896 they constituted 32.76 per cent., and in 1897, 39.66 per cent. of the total number of industries. A decrease is noted in the first three classes, or up to 230 but under 250 days, with one industry less in the class representing 300 days and over.

However, combining the last three classes, or groups, it is found that the industries in operation from 270 to 300 days and over comprised 51.72 per cent. of all industries in 1896, and 62.07 per cent. in 1897.

In the following table the average number of days in operation in the seven selected industries is shown:

Industries.	No. of establishments considered.	Average Number of Days in Operation.		Increase (+) or Decrease (—) in 1897.	
		1896.	1897.	Days.	Percentage.
Flour and feed	86	263.66	271.42	+ 7.76	+ 2.94
Lager beer	71	301.37	300.97	— 0.40	— 0.13
Leather	33	280.16	293.03	+ 12.87	+ 4.59
Lumber, lath and shingles	168	190.38	203.91	+ 13.53	+ 7.11
Machines and machinery	86	272.64	282.88	+ 10.24	+ 3.75
Paper and pulp	54	288.78	287.85	— 0.93	— 0.35
Sash, doors, blinds, etc	73	248.02	257.14	+ 9.12	+ 3.67
Other industries	948	263.38	270.88	+ 7.40	+ 2.81
All industries	1,499	263.40	270.81	+ 7.41	+ 2.81

In the above table two industries, lager beer and paper and pulp, show a slight decrease in 1897, being less than one-half day in the one and less than one day in the other. Flour and feed exhibits an increase of nearly 8 days; leather, about 13 days; lumber, lath, etc., about 14 days; machines and machinery, about 10 days, and sash, doors, etc., about 9 days. The increase in the other industries aside from the seven was over seven days, and the average gain in all industries the same.

The following summary reproduces the leading statistical facts relative to all industries:

Classification.	1896.	1897.	Increase (+) or Decrease (—) in 1897.	
			Amount.	Per cent.
Number of private firms	619	625	+ 6	+ 0.99
Number of corporations	614	608	— 6	— 0.98
Number of partners	1,134	1,325	+ 191	+ 16.84
Number of stockholders	7,214	7,716	+ 502	+ 6.96
Amount of capital invested	$175,905,124	$189,760,669	+ $13,855,545	+ 7.87
Value of stock used	$87,027,266	$98,130,070	+ $11,102,804	+ 12.76
Value of goods made and work done	$155,152,906	$169,946,673	+ $14,793,767	+ 9.53
Persons employed:				
Average number	80,051	87,534	+ 7,483	+ 9.35
Smallest number	65,569	71,207	+ 5,638	+ 8.60
Greatest number	99,546	109,839	+ 10,293	+ 10.33
Excess of greatest over smallest number	33,977	38,632	+ 4,655	+ 13.70
Total amount paid in wages	$31,749,822	$36,583,044	+ $4,833,222	+ 15.22
Average yearly earnings	$386.63	$416.79	+ $30.16	+ 7.80
Average proportion of business done	69.53	71.80	+ 2.27	+ 3.26
Average number of days in operation	263.40	270.81	+ 7.41	+ 2.81

Comparisons in the above table will be more comprehensive when it is borne in mind that the items of which the table is composed are the totals from returns rendered by identical establishments reporting for each year.

With but one exception, for every item of the above table the percentages indicate an increase. That exception is in the number of corporations, which show a decline of 0.98 per cent. Private firms correspondingly gains by about the same percentage. The number of partners increased 16.84 per cent., and though the number of corporations show a slight decrease, the number of stockholders nevertheless increased 6.96 per cent.

It will be seen that the amount of capital invested increased to the extent of 7.87 per cent.; value of stock used, 12.76 per cent., and value of goods made and work done, 9.53 per cent. An increase of 9.35 per cent is shown in the average number of persons employed—8.60 per cent. in the smallest number, and 10.33 per cent. in the greatest number—while the excess of greatest over smallest number of persons employed indicates an increase of 13.70 per cent.

The total amount paid in wages exhibits an increase of 15.22 per cent., and an increase of 7.80 per cent. is shown for the average yearly earnings. The average proportion of business done, based upon the full productive capacity of the establishments, was greater by 3.26 per cent in 1897 than in 1896, and the average number of days in operation exceeded 1896 by 2.81 per cent.

By the term, "value of goods made and work done," made use of in this report thus far, is, of course, meant the gross value of the goods made, or their selling price, in other words, the gross product. We shall in the next table make use of the term "industry product," and an explanation of the term is necessary.

If we subtract from the value of goods made (gross product) the value of stock and other materials consumed in the processes of manufacture, in the different industries, we have remaining the actual result of the productive forces in the industry, that is, the product created above the value of stock and materials used. To this balance or remainder we apply the term "industry product." This industry product is divided into two parts. Labor, as one of the leading factors of production, receives its share of the product in the form of wages; the other part remaining as a fund from which are paid profits, freight, salaries, insurance, interest, rents, repairs, commissions, etc., that is to say, "a profit and minor expense fund."

A series of separate tables are next given for the seven selected industries, for the purpose of comparison between the two years, 1896 and 1897. Some of the items made use of are reproduced from preceding tables, but the points brought out in these tables are the actual product per $1,000 of capital invested, the average product per employe, based both upon the industry product and the gross product; the percentage of the industry product, as well as the gross product paid in wages; the percentage devoted to other expenses based both on gross and industry product; the percentage of profit and other expense fund of capital invested, and the average investment to each partner or stockholder.

The first table in the series is for:

FLOUR AND FEED (86 ESTABLISHMENTS).

Classification.	1896.	1897.
Amount of capital invested	$6,449,116	$7,411,133
Value of goods made and work done (gross product)	19,186,223	22,016,981
Value of stock and other materials used in production	15,889,410	18,724,577
Industry product (gross product less value of stock and materials)	3,296,813	3,292,404
Wages (labor's direct share of product)	547,830	586,731
Profit and minor expense fund (industry product less wages)	2,748,983	2,705,673
Percentage of industry product paid in wages	16.62	17.82
Percentage of industry product devoted to profit and minor expenses	83.38	82.18
Percentage of profit and minor expense fund of capital invested	42.63	36.58
Product per $1,000 capital invested (industry product)	511.20	430.75
Average product per employe (industry product)	3,010.71	2,908.43
Percentage of value of gross product paid in wages	2.86	2.66
Percentage of value of gross product devoted to profit and minor expenses	14.33	12.29
Average investment to each partner or stockholder	15.068	12,466
Average gross product to each employe	17.522	19,245
Average yearly earnings per employe	500.30	518.31
Average number of persons employed	1,095	1,144

The percentage of the industry product paid in wages in the above industry is 16.62 in 1896 and 17.82 in 1897, an increase in the latter year. Comparing this with the percentage of the gross product paid in wages, we find it to be 2.86 per cent. in 1896, and 2.66 per cent. in 1897, or a slight decrease for the latter year. The reason for this apparent difference, namely, an increase in the percentage allotted to wages considered from the point of industry product, and a decrease for the same year when considered from the point of gross product, is found by examining the value of the gross product and the value of stock and materials used. It is seen that the value of the gross product in 1897 is 14.75 per cent. in excess over that of 1896, but the value of stock and materials consumed is even greater by over 3 per cent., being 17.84 per cent. greater than in 1896. As the value of the industry product is found by subtracting the value of stock and materials consumed from that of the gross product, it leaves in this instance the industry product practically the same for both years. The industry product and the gross product being both used as divisors to get the percentage paid in wages, the effect upon the result is plainly seen, as the total amount paid in wages is but little higher in 1897 than in 1896. What is true in this respect regarding the above industry, is also true in a greater or less degree in all the other industries.

The percentage of industry product devoted to profit and minor expenses was 83.38 per cent. in 1896 to 82.18 in 1897, and the percentage of the gross product for the same purpose was 14.33 in 1896 to 12.28 in 1897, or in other words, the manufacturers received less in 1897 than in 1896 with which to pay the same expenses. The percentage of this profit and expense fund on the amount of capital invested was 42.63 in 1896, and 36.58 in 1897.

The productive capacity of each $1,000 invested in the above industry was $511.20 in 1896, falling to $430.75 in 1897. This is a decrease of 15.73 per cent. The solution for this decrease is again found in the practically unchanged value of the industry product for the two years. As will be seen in the above table, the capital invested to manufacture this product was increased in 1897 by 14.91 per cent., or nearly the equivalent of the above decrease. This fact is also applicable to other industries.

The average value of industry product per employe is seen to be $3,010.71 for 1896, and $2,908.48 for 1897, a decrease of 3.39 per cent. The increase by this same per cent. of the number of persons employed to produce the same amount of goods, explains this decrease. The average gross product per employe was $17,522 in 1896 and $19,245 in 1897, an increase of 9.83 per cent. in the individual output.

The average investment per partner or stockholder was $15,068 in 1896 and $12,466 in 1897, a decrease in the average individual investment of $2,602, indicating an increased number of partners and stockholders.

The following little table, which may be considered as part of the above industry presentation, indicates by percentages the ratio of gross product to the amount of capital invested. The capital in each industry is in each instance considered as 100. The percentage indicating the gross product is the relative proportion said product bears to the amount of capital invested. If the value of the gross product is greater than the amount of capital invested, it is indicated by a percentage greater than 100, but if the opposite is true, a percentage less than 100 is shown.

Thus, in the following industry—flour and feed,—as will be seen in the table next following, the value of goods made, or gross product, was nearly three times as great as the amount of capital it took to produce it. Both years show over 297 per cent., which is an excess of value of goods made over the amount of capital invested of over 197 per cent.

The table follows:

FLOUR AND FEED.

CLASSIFICATION.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	297.50	....	297.08
Excess of value of goods made over capital invested	197.50	....	197.08	....
Total	297.50	297.50	297.08	297.08

The next presentation relates to lager beer.

LAGER BEER (71 ESTABLISHMENTS).

Classification.	1896.	1897.
Amount of capital invested	$33,943,545	$35,539,091
Value of goods made and work done (gross product)	15,394,071	16,945,217
Value of stock and other materials used in production	3,270,795	3,702,671
Industry product (gross product less value of stock and materials)	12,123,276	13,242,546
Wages (labor's direct share of product)	1,649,640	1,686,468
Profit and minor expense fund (industry product less wages)	10,473.636	11,556.078
Percentage of industry product paid in wages	13.61	12.73
Percentage of industry product devoted to profit and minor expenses	86.39	87.27
Percentage of profit and minor expense fund of capital invested	30.87	32.54
Product per $1,000 capital invested (industry product)	357.16	372.62
Average product per employe (industry product)	3,869	4,260
Percentage of value of gross product paid in wages	10.71	10.54
Percentage of value of gross product devoted to profit and minor expenses	68.04	68.20
Average investment of each partner or stockholder	71,450	70,735
Average gross product to each employe	4,913	5,452
Average yearly earnings per employe	526.54	542.62
Average number of persons employed	3,133	3,108

The percentage of industry product paid in wages in the above industry in 1896 and 1897 was 13.61 and 12.73, respectively, being a small decrease for the last named year. The percentage of the gross product allotted to wages also shows a slight decrease for 1897. The percentages of industry and gross products used for profit and other expenses show a small increase over 1896, as does the industry product per 1,000 of capital invested.

The average industry and gross product per employe show an increase of $391 and $539, respectively. The average investment, however, shows a decrease of $1,215 per partner or stockholder for 1897.

The relation of the gross product to the capital invested is indicated in the table below:

LAGER BEER.

CLASSIFICATION.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	45.35	....	47.68
Excess of capital over value of goods made	....	54.65	....	52.32
Total	100.00	100.00	100.00	100.00

It is seen that the relation of the value of goods made was 45.35 per cent. of the capital invested in 1896, the proportion increasing in 1897 to 47.68 per cent.

A similar comparison follows for leather:

LEATHER (33 ESTABLISHMENTS).

Classification	1896.	1897.
Amount of capital invested	$10,394,318	$12,124,012
Value of goods made and work done (gross product)	13,445,346	15,153,361
Value of stock and other materials used in production	9,789,314	11,320,816
Industry product (gross product less value of stock and materials)	3,656,032	3,832,545
Wages (labor's direct share of product)	1,790,571	2,028,342
Profit and minor expense fund (industry product less wages)	1,865,461	1.804.203
Percentage of industry product paid in wages	48.98	52.92
Percentage of industry product devoted to profit and minor expenses	51.02	47.08
Percentage of profit and minor expense fund of capital invested	17.94	14.88
Product per $1.000 capital invested (industry product)	351.73	316.11
Average product per employe (industry product)	842.40	770.84
Percentage of value of gross product paid in wages	13.31	13.38
Percentage of value of gross product devoted to profit and minor expenses	13.87	11.91
Average investment to each partner or stockholder	5,889	6,650
Average gross product to each employe	3.098	3,110
Average yearly earnings per employe	412.57	426.66
Average number of persons employed	4,340	4,872

In this industry the percentage of industry product paid in wages was 48.98 in 1896 and 52.92 in 1897, an increase for the latter year. Correspondingly, the percentage devoted to profit and other expenses shows a decrease for the same period, being 51.02 in 1896 and 47.08 in 1897. The profit and minor expense fund was 17.94 per cent. of capital invested in 1896, and 14.88 per cent in 1897. The percentage of gross product paid in wages was practically the same for both years, being 13.31 and 13.38, respectively.

The product per $1,000, measured by the industry product, was less in 1897 than in 1896. This was also true of the average industry product per employe. The average gross product to each employe, and the average individual investment show a small increase in the latter year.

The relative proportion of value product to the amount of capital in this industry is found in the next table:

LEATHER.

Classification.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	129.35	....	124.99
Excess of value of goods made over capital invested	29.35	....	24.99	....
Total	129.35	129.35	124.99	124.99

It is seen that the value of product for each year exceeds the amount of capital invested, being 29.35 per cent in excess in 1896 and 24.99 per cent. in 1897, indicating a smaller proportionate output in the latter year.

The next table relates to lumber, lath and shingles:

LUMBER, LATH AND SHINGLES (168 ESTABLISHMENTS.)

Classification.	1896.	1897.
Amount of capital invested	$44,989,633	$45,642,002
Value of goods made and work done (gross product)	18,322,764	22,043,162
Value of stock and other materials used in production	9,861,062	12,187,522
Industry product (gross product less value of stocks and materials	8,461,702	9,855,640
Wages (labor's direct share of product)	3,904,245	4,566,264
Profit and minor expense fund (industry product less wages)	4,557,457	5,288,376
Percentage of industry product paid in wages	46.14	46.33
Percentage of industry product devoted to profit and minor expenses	53.86	53.67
Percentage of profit and minor expense fund of capital invested	10.12	11.58
Product per $1,000 capital invested (industry product)	188.08	215.93
Average product per employe (industry product)	733.16	833.31
Percentage of value of gross product paid in wages	21.31	20.72
Percentage of value of gross product devoted to profit and minor expenses	24.87	23.99
Average investment to each partner or stockholder	70,627	61,927
Average gross product to each employe	1,587	1,864
Average yearly earnings per employe	338.26	386.09
Average number of persons employed	11,542	11,827

A comparison between the years 1896 and 1897 reveals slight changes in the percentage of industry product paid in wages, the percentage of industry product devoted to profit and other expenses, and the percentage of the same items of capital invested.

The average product per employe, both of the industry product and of the gross product, shows a large increase in 1897, being $100.25 and $277, respectively.

The amount of product per $1,000 capital seems to be very small, being $188.08 in 1896 and $215.93 in 1897, but this is, no doubt, owing to the great amount of capital invested in this industry.

The percentage of gross product paid in wages shows a slight decrease for 1897, as does the percentage of gross product used for profit and other expenses, being 24.87 in 1896 and 23.99 in 1897. The profit and minor expense fund was 10.12 per cent. of capital invested in 1896 and 11.58 per cent. in 1897, indicating a little better return on the capital invested than in the first named year.

The great decline of $8,700 in the average investment per partner or stockholder in 1897 would indicate a greater diffusion of capital in that industry, inasmuch as the total amount of capital invested was increased considerably in 1897.

The relation of gross product to the amount of capital in the above industry is found in the following table:

LUMBER, LATH AND SHINGLES.

CLASSIFICATION.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	40.73	....	48.30
Excess of capital over value of goods made	....	59.27	....	51.70
Totals	100.00	100.00	100.00	100.00

The proportionate value of goods made to that of invested capital is seen to be higher in 1897, the percentage standing 40.73 and 48.30, respectively, and the corresponding excess of capital over value of goods made is 59.27 and 51.70 per cent., respectively, for the two years.

The next table is a comparison for machines and machinery:

MACHINES AND MACHINERY (86 ESTABLISHMENTS).

Classification.	1896.	1897.
Amount of capital invested	$8,244,923	$9,038,030
Vaule of goods made and work done (gross product)	7,662,023	8,155,581
Value of stock and other materials used in production	3,059,369	3,333,014
Industry product (gross product less value of stock and materials)	4,602,654	4,822,567
Wages (labor's direct share of product)	2,195,742	2,343,671
Profit and minor expense fund (industry product less wages)	2,406,912	2,478,896
Percentage of industry product paid in wages	47.71	48.59
Percentage of industry product devoted to profit and minor expenses	52.29	51.41
Percentage of profit and minor expense fund of capital invested	29.19	27.42
Product per $1,000 capital invested (industry product)	558.24	533.58
Average product per employe (industry product)	1,066.17	1,075.00
Percentage of value of gross product paid in wages	28.66	28.73
Percentage of value of gross product devoted to profit and minor expenses	31.41	30.39
Average investment to each partner or stockholder	27,949	27,555
Average gross product to each employe	1,775	1,818
Average yearly earnings per employe	508.63	522.44
Average number of persons employed	4,317	4,486

In the above industry it is noticeable that substantially the same conditions prevail in one year as in the other, the variation in nearly all percentages being less than one per cent. The percentage of profit and other expense fund of capital invested offers one exception, the difference of 1.77 per cent. being noted as a decrease for 1897, and the percentage which this fund forms of the value of the gross product also shows a decrease of little more than one per cent., being 31.41 and 30. 39 per cent., respectively.

The relation of capital and product is found in the following table:

MACHINES AND MACHINERY.

CLASSIFICATION.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	92.93	....	90.24
Excess of capital over value of goods made	....	7.07	....	9.76
Totals	100.00	100.00	100.00	100.00

In the above industry the value of goods made in relation to the capital invested is represented by 92.93 per cent. in 1896 and 90.24 per cent. in 1897, indicating a small decrease in the proportionate output for the last mentioned year.

The next table is for paper and pulp:

PAPER AND PULP (34 ESTABLISHMENTS).

Classification.	1896.	1897.
Amount of capital invested	$8,224,977	$9,014,723
Value of goods made and work done (gross product)	6,592,166	6,556,806
Value of stock and other materials used in production	3,392,882	3,481,577
Industry product (gross product less value of stock and materials)	3,199,284	3,074,229
Wages (labor's direct share of product)	1,243,243	1,240,476
Profit and minor expense fund (industry product less wages)	1,956,041	1,833,753
Percentage of industry product paid in wages	38.86	40.35
Percentage of industry product devoted to profit and minor expenses	61.14	59.65
Percentage of profit and minor expense fund of capital invested	23.41	20.34
Product per $1,000 capital invested (industry product)	389.04	341.02
Average product per employe (industry product)	1,026.39	975.32
Percentage of value of gross product paid in wages	18.86	18.88
Percentage of value of gross product devoted to profit and minor expenses	29.67	27.97
Average investment of each partner or stockholder	43,518	50,930
Average gross product to each employe	2,115	2,079
Average yearly earnings per employe	398.85	393.71
Average number of persons employed	3,117	3,152

In this industry the percentage paid in wages of the industry product increased from 38.66 per cent. in 1896 to 40.35 per cent. in 1897. A corresponding decrease is found in the percentage of industry product devoted to profit and minor expenses, this percentage being 61.14 in 1896 and 59.65 in 1897. The percentage of profit and minor expense fund of capital invested was greater in 1896, being 23.41 to 20.34 per cent. in 1897.

The percentage of gross product paid in wages is almost identical for both years, while the percentage of the gross product to profit and expense fund shows a small decline, being 29.67 in 1896 and 27.97 per cent. in 1897.

The industry product per $1,000 capital invested, the average product per employe both of the industry and gross product, show a falling off. The average investment per partner or stockholder shows a noticeable increase of $7,412 for the latter year.

The relation of capital and product is presented as follows:

PAPER AND PULP.

CLASSIFICATION.	1896.		1897.	
	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Capital	100.00	....	100.00	....
Value of goods made	....	80.15	....	72.72
Excess of capital over value of goods made	....	19.85	....	27.28
Totals	100.00	100.00	100.00	100.00

The value of goods made in 1897 in the above industry is relatively smaller than in 1896 when compared to the amount of capital invested, being 80.15 per cent. in 1896 to 72.72 in 1897. The excess of capital over the value of product showing 19.85 per cent. and 27.28 per cent., respectively, for the two years.

The next presentation is for sash, doors, blinds, etc.:

SASH, DOORS, BLINDS AND MOULDINGS (73 ESTABLISMENTS)

Classification.	1896.	1897.
Amount of capital invested	$5,504,932	$5,541,357
Value of gods made and work done (gross product)	5,002,046	5,260,706
Value of stock and other materials used in production	2,680,742	2,879,007
Industry product (gross product less value of stock and materials)	2,321,303	2,381,699
Wages (labor's direct share of product)	1,086,510	1,159,449
Profit and minor expense fund (industry product less wages)	1,234,793	1,222,250
Percentage of industry product paid in wages	46.80	48.68
Percentage of industry product devoted to profit and minor expenses	53.20	51.32
Percentage of profit and minor expense fund of capital invested	22.43	22.06
Product per $1,000 capital invested (industry product)	421.68	429.80
Average product per employe (industry product)	723.82	679.12
Percentage of value of gross product paid in wages	21.72	20.92
Percentage of value of gross product devoted to profit and minor expenses	24.68	23.23
Average investment to each partner or shareholder	20.388	20,373
Average gross product to each employe	1,559	1,500
Average yearly earnings per employe	338.79	330.61
Average number of persons employed	3,207	3,507

No material change is found in any of the items presented for the above industry. All the percentages but one show a slight decrease for 1897. The percentage of industry product paid in wages is the only one showing an increase, being 46.80 per cent. in 1896 and 48.68 per cent. in 1897.

The industry product per $1,000 of capital invested shows a little better return for 1897, being $429.80 to $421.68 for 1896.

The relative position of the value of goods made to that of capital invested is shown in the following table of percentages:

SASH, DOORS, BLINDS, ETC.

CLASSIFICATION.	1896.		1897.	
	Per cent.	Per cent.	Per cent.	Per cent.
Capital	100.00	....	100.00	....
Value of goods made	....	90.86	....	94.94
Excess of capital over value of goods made	....	9.14	....	5.06
Totals	100.00	100.00	100.00	100.00

For the two years considered, the value of the goods made has nearly equalled the amount of capital used to produce it. Thus, in 1896 it was 90.86 per cent. of the capital used, increasing in 1897 to 94.94 per cent.

The final table relates to all industries:

ALL INDUSTRIES.

Classification.	1896.	1897.
Amount of capital invested	$175,905,124	$189,760.669
Value of goods made and work done (gross product)	155,152,906	169,946,673
Value of stock and other materials used in production	87,027,266	98,130,070
Industry product (gross product less value of stock and materials	68,125,640	71,816.603
Wages (labor's direct share of product)	31,749,822	36,583,044
Profit and minor expense fund (industry product less wages)	36,375,818	35,233.565
Percentage of industry product paid in wages	46.64	50.94
Percentage of industry product devoted to profit and minor expenses	43.36	49.06
Percentage of profit and minor expense fund of capital invested	20.67	18.56
Product per $1,000, capital invested (industry product)	387.29	325.76
Average product per employe (industry product)	851.02	820.44
Percentage of value of gross product paid in wages	20.46	21.52
Percentage of value of gross product devoted to profit and minor expenses	23.42	20.73
Average investment to each partner or stockholder	21,071	20,989
Average gross product to each employe	1,903	1,941
Average yearly earnings per employe	386.63	416.79
Average number of persons employed	80,051	87,534

The relative condition as between the two years for all industries is to some extent shown in the percentages in the above table.

When we analyze the proportions of the industry product paid in wages, and the amount going to the profit and minor expense fund, we find that a greater percentage was paid in wages in 1897, the percentages being 46.64 and 50.94, respectively.

On the other hand, the part devoted to profit and minor expenses was more favorable to the manufacturers in 1896 than in 1897, the percentage being 53.36 for the first named year and 49.06 for the last.

The percentage which this profit and expense fund forms of the amount of capital invested, is corroborative of the last mentioned item, the percentages standing 20.67 for 1896 and 18.56 for 1897. The percentage paid in wages of the gross product indicates the same as the percentage of the industry product, namely, that the year 1897 was more favorable to wages than the preceding year, the percentages being 20.46 and 21.52, respectively.

The percentage of the gross product devoted to profit and minor expenses was 23.42 in 1896 and 20.73 in 1897.

The efficiency of capital appears to be less in 1897, as the value of the industry product per $1,000 capital invested was $387.29 in 1896 to $325.76 in 1897. The average industry product per employe was also a little less for the latter year, but the average to each worker of the gross product shows an increase for 1897.

The average investment per partner or stockholder was practically the same for both years.

The proportion of the gross product to the amount of capital invested is a little higher in 1897, being 89.56 per cent. to 88.20 per cent. the preceding year, as indicated in the following and final table:

ALL INDUSTRIES.

Classification.	1896.		1897.	
	Percentages.	Percentages.	Percentages.	Percentages.
Capital	100.00		100.00	
Value of goods made		88.20		89.56
Excess of capital over value of goods made		11.80		10.44
Totals	100.00	100.00	100.00	100.00